

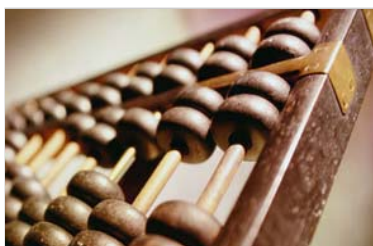


UMASS DONAHUE INSTITUTE

Business and Organizations Located in Devens, Massachusetts

Profile and Economic Contributions

June 2013



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Summary of Key Findings

As home to a thriving community of high-tech and related businesses, Devens, Massachusetts, is a significant employment center and contributor to the Commonwealth's high-tech economy.¹

Advanced manufacturing, government services, wholesale trade, and transportation and warehousing are all strongly represented in Devens. In 2013, firms in Devens employ 3,634 people, and the economic activities of firms and nonprofit organizations in Devens support employment of an additional 3,705 people in Massachusetts. An estimated \$842 million in direct economic activity by private and nonprofit organizations in Devens supports additional spending of \$600 million in local supply chains for a total contribution of more than \$1.4 billion to the Massachusetts economy.²

Business Profile

- Of the 87 Devens establishments, 72 percent are private businesses, 22 percent are nonprofits, and the remainder consists of governmental entities.
- Devens businesses employ 3,634 people in 2013, an increase of 426 over the comparable 2010 figure of 3,208.³ Most of this growth occurred in manufacturing, transportation and warehousing, and professional and technical services, and mostly in the private sector.
- Devens hosts a diverse group of businesses, with the top three ranked industries as follows: 1) professional and technical services (16 businesses); 2) manufacturing (14

¹ This report accounts for the spending activities of the commercial, nonprofit, and governmental entities located in Devens commercial districts (Barnum Business Park, Devens Business Services District, Devens Industrial Park, Innovation Technology Center District, and Jackson Technology Park). This report does not include the spending of recreational visitors to Devens, spending associated with residential development, or military spending associated with Fort Devens.

² Following standard practice, government expenditures (transfers) are not modeled as economic contributions in this report.

³ University of Massachusetts Donahue Institute. *Business and Organizations Located in Devens, Massachusetts: Profile and Economic Contributions*. 2012.

businesses); and 3) wholesale trade businesses, and transportation and warehousing (each with seven businesses).

- Of the 3,634 people that businesses, nonprofits, and government organizations in Devens employ, the private sector employs 2,641, or nearly three quarters of that total. The five most significant individual employers in Devens are the Federal Medical Center (a facility housing offenders in need of medical care), Bristol-Myers Squibb (biologics manufacturing), Parker-Hannifin Corp. (Nichols Aircraft Division; aircraft component manufacturing), Quiet Logistics (high-tech order fulfillment services), and Johnson Matthey Pharma Services (specialized chemistry for drug development).
- Total estimated 2012 third quarter employee wages in Devens top \$251 million.
- Due to the mix of firms and organizations in Devens, average wages there are high relative to the Commonwealth: \$69,210 versus \$57,304.

Devens Establishments: Employment, Total Wages, and Average Annual Wages, 2013

Type	Total Employment	Percent of Total Employment	Total Wages	Average Annual Wages
Government	605	17%	\$44,440,344	\$73,455
Nonprofit	388	11%	\$19,354,608	\$49,883
Private Sector	2,641	73%	\$187,715,840	\$71,078
Totals	3,634	100%	\$251,510,792	\$69,210

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Estimated wages as of third quarter 2012 (most recent available).

Economic Contributions

- Devens private sector and nonprofit establishments had estimated combined sales of more than \$841 million and employed 3,029 people.⁴
- Spending by Devens private and nonprofit entities supported an additional estimated \$600 million in spending throughout Massachusetts supply chains and an additional estimated 3,705 Massachusetts employees.

Devens Private and Nonprofit Economic and Employment Contributions in Massachusetts

	Direct	Indirect and Induced Contributions	Total Contributions
Output	\$841,759,531	\$600,363,152	\$1,442,122,683
Employment	3,029	3,705	6,734

Sources: ReferenceUSA, MassDevelopment, and MIG, Inc. IMPLAN System.

- Private firms in Devens paid an estimated \$2.95 million in state corporate profits tax.
- Employees of private and nonprofit firms in Devens paid an estimated \$13.59 million in personal income tax.

⁴ Following standard practice for economic contribution analyses, governmental entities were not included in the economic contribution analysis based on the assumption that these contributions would be more likely to continue in the form of alternate economic activity if the specific government entities left Devens. We assume that if a governmental entity were not spending the money on services in Devens, then that government entity would likely spend the money elsewhere.

Introduction

Devens, a 4,400-acre community managed by MassDevelopment, is an important center for commercial, industrial, and residential activities in north-central Massachusetts. MassDevelopment commissioned the University of Massachusetts Donahue Institute to study the employment and economic contributions of Devens businesses, nonprofits, and government entities. This report includes analysis of Devens establishments, employment, and estimated wages by sector (private, nonprofit, and government) as well as by industry. This report also presents an analysis of the indirect and induced economic effects on the rest of Massachusetts attributable to the direct economic activities undertaken in Devens. Organizations in Devens operate largely in the private sector, although government entities make up 16 percent of employment. The strongest industries in Devens are manufacturing; professional and technical services; transportation and warehousing; and wholesale trade.

This report accounts for the spending activities of the commercial, nonprofit, and governmental entities in Devens commercial districts (Barnum Business Park, Devens Business Services District, Devens Industrial Park, Innovation Technology Center District, and Jackson Technology Park). This report does not discuss the spending of recreational visitors to Devens, spending associated with residential development, or military spending associated with Fort Devens.

Profile and Contributions

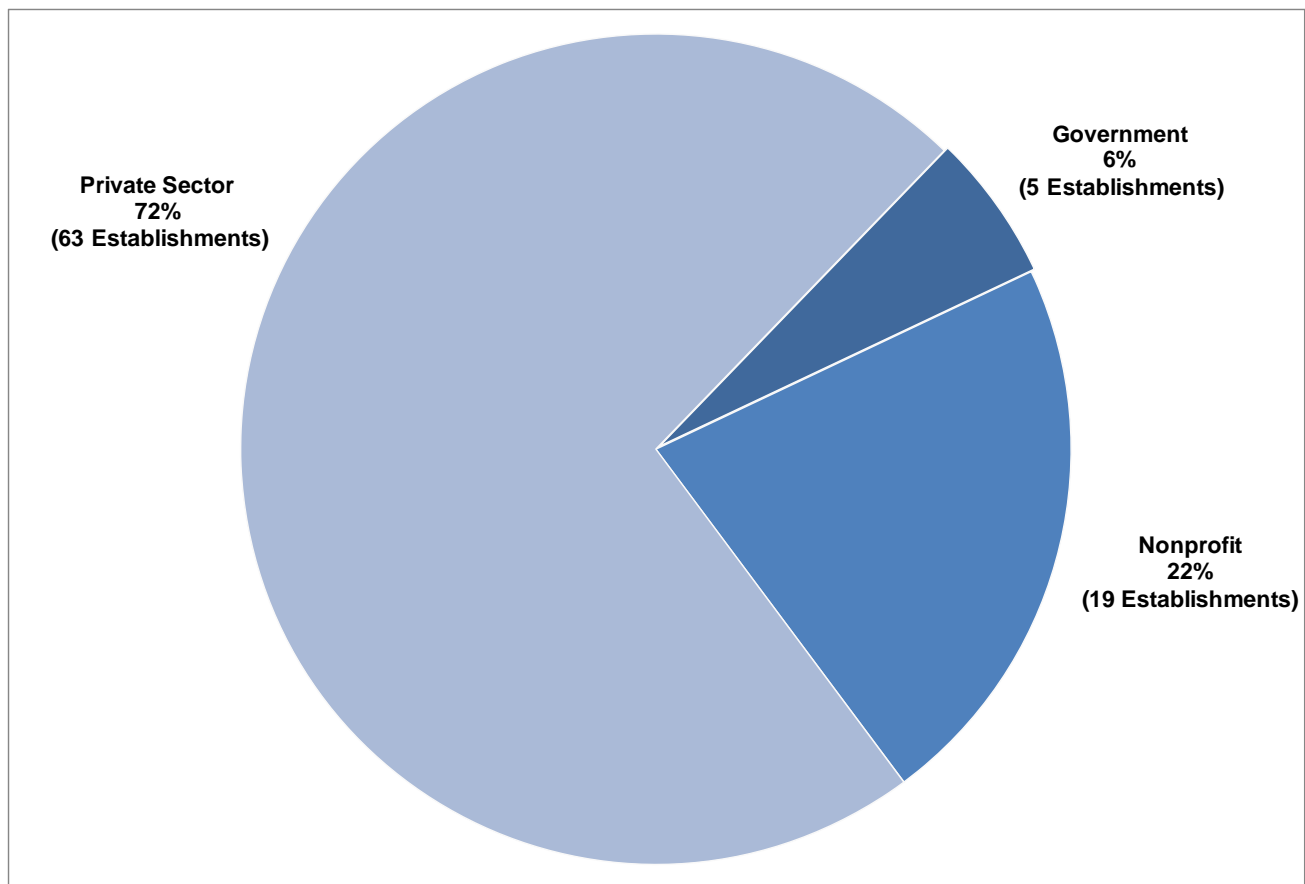
Overview and Profile of Businesses and Organizations in Devens

Aggregate Business Profile Analysis

Establishment Type and Count

Of the 87 Devens establishments, 72 percent are in the private sector, 22 percent are nonprofits, and six percent are government entities. A complete list of businesses and organizations appears in Appendix B (alphabetical) and Appendix C (by industry type/NAICS code).

Figure 1: Devens Establishments by Type, 2013



Sources: ReferenceUSA and MassDevelopment.

Aggregate Employment and Wages

Devens businesses and organizations employ 3,634 people, with the private sector employing 2,641, nearly three-quarters of the total. Total estimated employee wages in Devens top \$250 million. Due to the mix of firms and organizations, estimated average wages in Devens are high relative to those in the Commonwealth: \$69,210 versus \$57,304. In Devens, the estimated average annual employee wage in the private sector is more than \$71,000, in government more than \$73,000, and in nonprofit organizations more than \$49,800.

Figure 2: Devens Establishments: Employment, Total Wages, and Average Annual Wages, 2013

Type	Total Employment	Percent of Total Employment	Total Wages	Average Annual Wages
Government	605	17%	\$44,440,344	\$73,455
Non-profit	388	11%	\$19,354,608	\$49,883
Private Sector	2,641	73%	\$187,715,840	\$71,078
Totals	3,634	100%	\$251,510,792	\$69,210

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Aggregate Industry Analysis

Many of the strongest industries in Devens are overrepresented compared to the Massachusetts economy as a whole: professional, scientific, and technical services (19.5 percent of Devens establishments versus 13.2 percent statewide); manufacturing (16.1 percent versus 3.2 percent); wholesale trade (8 percent versus 6.4 percent); and transportation and warehousing (8 percent versus 1.9 percent). Public administration (including both government and nonprofit entities in Devens) is also overrepresented in Devens at 6.9 percent versus 1.5 percent. Some businesses types

appear in lower concentrations in Devens, namely, retail (1.1 percent of Devens establishments versus 10.7 percent in Massachusetts) and construction (1.1 percent vs. 8.7 percent).⁵

Figure 3: Industry Sector Proportions and Wages in Devens versus Massachusetts, 2013

Industry Description	Devens			Massachusetts		
	Establishments	Percent of Establishments	Average Annual Wages	Establishments	Percent of Establishments	Average Annual Wages
Professional, Scientific, and Technical Services	17	19.5%	\$99,399	29,304	13.2%	\$97,760
Manufacturing	14	16.1%	\$74,241	7,179	3.2%	\$75,764
Wholesale Trade	7	8.0%	\$74,612	14,264	6.4%	\$77,272
Transportation and Warehousing	7	8.0%	\$57,670	4,239	1.9%	\$49,348
Educational Services	6	6.9%	\$53,730	3,935	1.8%	\$56,368
Health Care and Social Assistance	6	6.9%	\$27,861	16,968	7.7%	\$52,988
Public Administration	6	6.9%	\$73,590	3,430	1.5%	\$65,728
Accommodation and Food Services	5	5.7%	\$26,159	16,164	7.3%	\$20,228
Arts, Entertainment, and Recreation	4	4.6%	\$21,523	3,502	1.6%	\$31,824
Other Services (except Public Administration)	4	4.6%	\$39,995	44,501	20.1%	\$28,392
Finance and Insurance	3	3.4%	\$75,244	9,750	4.4%	\$97,188
Administrative and Support and Waste Management and Remediation	2	2.3%	\$51,986	11,731	5.3%	\$39,676
Construction	1	1.1%	\$64,532	19,224	8.7%	\$62,296
Utilities	1	1.1%	\$57,772	426	0.2%	\$88,504
Retail Trade	1	1.1%	\$20,644	23,643	10.7%	\$27,872
Information	1	1.1%	\$124,228	4,386	2.0%	\$88,296
Real Estate and Rental and Leasing	1	1.1%	\$51,428	6,317	2.9%	\$69,940
Management of Companies and Enterprises	1	1.1%	\$103,064	1,276	0.6%	\$103,064
Agriculture, Forestry, Fishing & Hunting	N/A	N/A	N/A	961	0.4%	\$48,464
Mining, Quarrying, and Oil and Gas Extraction	N/A	N/A	N/A	95	0.0%	\$57,356
Totals	87	100.0%	\$69,210	221,295	100.0%	\$57,304

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

⁵ Industries are those defined by the North American Industrial Classification System, or NAICS. NAICS is the standard coding system used by federal statistical agencies, including the Bureau of Labor Statistics, in classifying business establishments for collecting, analyzing, and publishing data related to the U.S. economy.

Manufacturing is a significant force in Devens, with 14 establishments and more than 1,200 employees. The largest manufacturing employers in Devens include Bristol-Myers Squibb (biologics manufacturing), Parker Hannifin Corp. (Nichols Aircraft Division; aircraft component manufacturing), RockTenn (paper product manufacturing), and Bionostics (healthcare laboratory instrument manufacturing). The professional, scientific, and technical services industry includes 17 businesses that employ 320 people. The largest employers are Johnson Matthey Pharma Services (specialized chemical development) and Integrated Process Technologies (engineering). While the large majority of businesses and employment in Devens are in the private sector (discussed in detail in the next section), the Federal Medical Center (FMC) Devens, which houses male offenders who require specialized or long-term medical care, falls under Public Administration and is one of the largest employers in Devens.

Figure 4: Total Establishments in Devens by Industry Type, 2013

Description	Establishments	Total Employment	Total Wages
Professional, Scientific, and Technical Services	17	320	\$31,807,776
Manufacturing	14	1,216	\$90,277,200
Wholesale Trade	7	412	\$30,740,112
Transportation and Warehousing	7	272	\$15,686,372
Educational Services	6	303	\$16,280,212
Health Care and Social Assistance	6	66	\$1,838,824
Public Administration	6	605	\$44,522,088
Accommodation and Food Services	5	139	\$3,636,152
Arts, Entertainment, and Recreation	4	66	\$1,420,536
Other Services (except Public Administration)	4	14	\$559,936
Finance and Insurance	3	10	\$752,440
Administrative and Support and Waste Management and Remediation Services	2	23	\$1,195,688
Utilities	1	3	\$173,316
Construction	1	75	\$4,839,900
Retail Trade	1	5	\$103,220
Information	1	10	\$1,242,280
Real Estate and Rental and Leasing	1	65	\$3,342,820
Management of Companies and Enterprises	1	30	\$3,091,920
Totals	87	3,634	\$251,510,792

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Analysis of Private Establishments

Nearly three-quarters of both the establishments and employees in Devens are in the private sector. Devens particularly appeals to companies focusing on technology-based manufacturing; medical and biological product manufacturing; professional and technical services; consulting; transportation-related services; wholesale trade; and accommodation and food services.

Employment, Wages, and Sales

Private companies located in Devens account for 72 percent of the jobs there (more than 2,600 employees). Estimated average annual wages in this sector exceed \$71,000. Together, these companies account for estimated annual sales of more than \$814 billion.

Figure 5: Private Sector in Devens: Establishments, Employment, Sales, Wages, and Average Wages, 2013

Establishments	63
Employment	2,641
Sales	\$814,775,104
Total Wages	\$187,715,840
Average Wages	\$71,078

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Note: Wages as of third quarter 2012 (most recent available).

Industry Analysis

Nearly 33 percent of employment in Devens comes from its 14 manufacturers. Manufacturing employment in Devens has grown from 906 employees in 2010 to 1,216 employees in 2013. This growth has been driven by a significant expansion at Bristol-Myers Squibb, growth at RockTenn, and the addition of Saint-Gobain (LED part manufacturing) in 2012. Devens' 16 private sector professional, scientific, and technical services firms employ 319 people at firms including Johnson Matthey Pharma Services and Integrated Process Technologies as well as a larger number of smaller firms and start-ups. The largest employers in wholesale trade include Ryerson (metals distributing and processing) and Patterson Veterinarian Supply, while the largest employers in transportation

and warehousing include Quiet Logistics (high-tech order fulfillment services) and USG Corporation (building materials). Industries that typically employ high-skill workers and pay high wages dominate the Devens private sector: manufacturing and wholesale trade have average annual wages of more than \$74,000, while professional, scientific, and technical services have average wages of more than \$99,000. The lowest average annual wages among Devens industries are in retail trade (\$20,644), and arts, entertainment, and recreation (\$21,320). Together, the private businesses in Devens in industries with an average wage less than the statewide average of \$57,304 account for only 305 employees, or 11.5 percent of private sector employment in Devens.

Figure 6: Private-Sector Establishments in Devens by Industry, 2013

Description	Establishments	Employment	Direct Output	Total Wages	Average Annual Wages
Professional, Scientific, and Technical Services	16	319	\$52,356,920	\$31,706,896	\$99,395
Manufacturing	14	1,216	\$581,332,938	\$90,277,200	\$74,241
Wholesale Trade	7	412	\$87,900,143	\$30,740,112	\$74,612
Transportation and Warehousing	6	268	\$32,883,049	\$15,488,980	\$57,795
Accommodation and Food Services	5	139	\$13,601,337	\$3,636,152	\$26,159
Arts, Entertainment, and Recreation	3	65	\$3,661,099	\$1,385,800	\$21,320
Administrative and Support and Waste Management and Remediation Services	2	23	\$5,217,786	\$1,195,688	\$51,986
Construction	1	75	\$8,521,368	\$4,839,900	\$64,532
Educational Services	1	2	\$112,761	\$45,864	\$22,932
Finance and Insurance	1	3	\$1,326,506	\$225,732	\$75,244
Health Care and Social Assistance	1	4	\$530,508	\$165,776	\$41,444
Information	1	10	\$5,464,617	\$1,242,280	\$124,228
Management of Companies and Enterprises	1	30	\$7,211,349	\$3,091,920	\$103,064
Other Services (except Public Administration)	1	2	\$104,795	\$54,184	\$27,092
Real Estate and Rental and Leasing	1	65	\$13,430,939	\$3,342,820	\$51,428
Retail Trade	1	5	\$250,502	\$103,220	\$20,644
Utilities	1	3	\$868,488	\$173,316	\$57,772
Totals	63	2,641	\$814,775,104	\$187,715,840	\$71,078

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Note: Wages as of third quarter 2012 (most recent available).

Analysis of Government Establishments

Devens government-related entities include large federal organizations as well as public services available to Devens residents and businesses, such as those provided by MassDevelopment and the U.S. Postal Service.

Employment and Wages

Devens' five government entities account for 605 employees. Average annual wages were more than \$73,000, with total annual wages of more than \$44 million.

Figure 7: Government Sector in Devens: Establishments, Employment, Wages, and Average Annual Wages, 2013

Establishments	5
Employment	605
Total Wages	\$44,440,344
Average Annual Wages	\$73,455

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Industry Analysis

Government employment is categorized in public administration (601 employees in Devens) except in the case of the postal service, which is categorized in transportation and warehousing. Public administration establishments in Devens include the Federal Medical Center, one of the largest employers in Devens, as well as MassDevelopment and the Massachusetts State Police. Average annual wages for the industries represented in Devens' government sector are \$73,455, well above the state average.

Figure 8: Government Establishments in Devens by Industry, 2013

Description	Establishments	Employment	Total Wages	Average Annual Wages
Public Administration	4	601	\$44,242,952	\$73,616
Transportation and Warehousing	1	4	\$197,392	\$49,348
Totals	5	605	\$44,440,344	\$73,455

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Analysis of Nonprofit Establishments

One in five entities in Devens is a nonprofit organization, with educational and social assistance organizations most common. Devens educational organizations include daycare centers; private and charter schools; a community college; and graduate schools. Additionally, social service providers, a museum, and credit unions are a part of this sub-sector.

Employment and Wages

The 19 nonprofit sector entities in Devens account for employees with an annual average wage of more than \$49,800 and total annual wages of more than \$19 million.

Figure 9: Nonprofit Sector in Devens: Establishments, Employment, Wages, and Average Annual Wages, 2013

Establishments	19
Employment	388
Total Wages	\$19,354,608
Average Annual Wages	\$49,883

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Industry Analysis

Educational services organizations are home to more than three quarters of total nonprofit employment in Devens and include the Shriver Job Corps, Francis W. Parker Charter Essential School,

and Mount Wachusett Community College / Devens Learning Center. Social services organizations like Seven Hills Family Services, Guild of St. Agnes Day Care, and Transitions at Devens round out this sector. Average annual wages for the industries represented in the Devens nonprofit sector are \$49,883, largely due to the mix of industries represented, with average annual wages of \$53,935 in educational services and only \$26,985 in health care and social services.

Figure 10: Nonprofit Establishments in Devens by Industry, 2013

Description	Establishments	Employment	Total Wages	Average Annual Wages
Educational Services	5	301	\$16,234,348	\$53,935
Health Care and Social Assistance	5	62	\$1,673,048	\$26,985
Other Services (except Public Administration)	3	12	\$505,752	\$42,146
Finance and Insurance	2	7	\$526,708	\$75,244
Public Administration	2	4	\$279,136	\$69,784
Arts, Entertainment, and Recreation	1	1	\$34,736	\$34,736
Professional, Scientific, and Technical Services	1	1	\$100,880	\$100,880
Totals	19	388	\$19,354,608	\$49,883

Sources: ReferenceUSA, MassDevelopment, and MA Labor Market Information ES-202.

Note: Wages as of third quarter 2012 (most recent available).

Economic Contributions of Commercial and Nonprofit Activity in Devens

The research team calculated economic contributions for private and nonprofit organizations in Devens.⁶ This analysis estimates economic contributions in two major categories – Devens organizations’ spending on goods and services, and their employees’ spending – and the resulting support of related industries and services. Direct contributions are the estimated total expenditures of Devens entities. Indirect and induced contributions represent entities’ support of Massachusetts businesses via spending for goods and services, as well as spending by employees in the local economy. Researchers estimated economic contributions using the well-regarded IMPLAN

⁶ Following standard practice for economic contribution analyses, governmental entities were not included in the economic contribution analysis based on the assumption that these contributions would be more likely to continue in the form of alternate economic activity if the specific government entities left Devens. We assume that if a governmental entity were not spending the money on services in Devens, then that government entity would likely spend the money elsewhere.

proprietary data and software, basing contributions for private-sector and nonprofit firms on employment figures of those firms.

Total Economic Contributions

Devens firms' estimated direct spending of \$841 million supports an additional estimated \$600 million in spending in Massachusetts for a total economic contribution of more than \$1.44 billion, with more than \$1.39 billion coming from private-sector firms and nearly \$50 million from nonprofit firms.

Figure 11: Massachusetts Economic Contributions of Devens Private-Sector and Nonprofit Firms, 2013

	Direct Contribution	Indirect and Induced Contributions	Total Contributions
Private Sector	\$814,775,104	\$577,455,573	\$1,392,230,677
Nonprofit	\$26,984,427	\$22,907,579	\$49,892,006
Totals	\$841,759,531	\$600,363,152	\$1,442,122,683

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Employment Contributions

The private-sector and nonprofit entities in Devens employ 3,029 people, and their spending supports an additional 3,705 workers for a total employment contribution to the Massachusetts economy of 6,734. Of the total supported employment, spending of private sector entities supports 6,198 employees, and spending of nonprofit entities supports 536 employees.

Figure 12: Massachusetts Employment Contribution of Private-Sector and Nonprofit Firms in Devens, 2013

	Direct Employment	Indirect and Induced Employment	Total Employment
Private Sector	2,641	3,557	6,198
Nonprofit	388	148	536
Totals	3,029	3,705	6,734

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Private Sector Detailed Economic Contributions

Spending by Devens private-sector firms and their employees supports a wide array of other industries in Massachusetts that supply goods and services to Devens firms. The indirect and induced economic contributions of private sector firms in Devens to the Massachusetts economy include more than \$78 million on professional, scientific, and technical services; \$59 million on finance and insurance; \$48 million in health care and social assistance; \$43 million in manufacturing; and \$42 million in wholesale trade.

Figure 13: Top Ten Industries Supported by Spending of Devens Private-Sector Firms, 2013

Industry	Indirect and Induced Contributions to Sector
Professional, Scientific, and Technical Services	\$78,191,447
Finance and Insurance	\$59,034,646
Health Care and Social Assistance	\$48,730,960
Manufacturing	\$43,737,152
Wholesale Trade	\$42,818,689
Management of Companies and Enterprises	\$41,735,694
Real Estate and Rental and Leasing	\$38,603,034
Information	\$30,907,517
Retail Trade	\$28,742,013
Transportation and Warehousing	\$25,474,091

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Nonprofit Detailed Economic Contributions

The indirect and induced economic contributions of Devens nonprofit entities to the Massachusetts economy include \$3.4 million for finance and insurance; \$3.1 million for real estate and rental and leasing activities; \$2.5 million for health care and social assistance; \$1.8 million for professional, scientific, and technical services; and \$1.4 million for information.

Figure 14: Top Ten Industries Supported by Spending of Devens Nonprofit Firms, 2013

Industry	Indirect and Induced Contributions to Sector
Finance and Insurance	\$3,399,861
Real Estate and Rental and Leasing	\$3,122,690
Health Care and Social Assistance	\$2,470,920
Professional, Scientific, and Technical Services	\$1,788,132
Information	\$1,442,355
Retail Trade	\$1,408,002
Accommodation and Food Services	\$1,000,869
Utilities	\$943,336
Administrative and Support and Waste Management and Remediation Services	\$900,437
Manufacturing	\$829,186

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Tax Contributions of Private and Nonprofit Firms in Devens

In addition to supporting the Commonwealth's economy through spending, Devens firms and their employees pay state corporate profit and personal income taxes. Corporate profit and personal income taxes were estimated using the IMPLAN software.

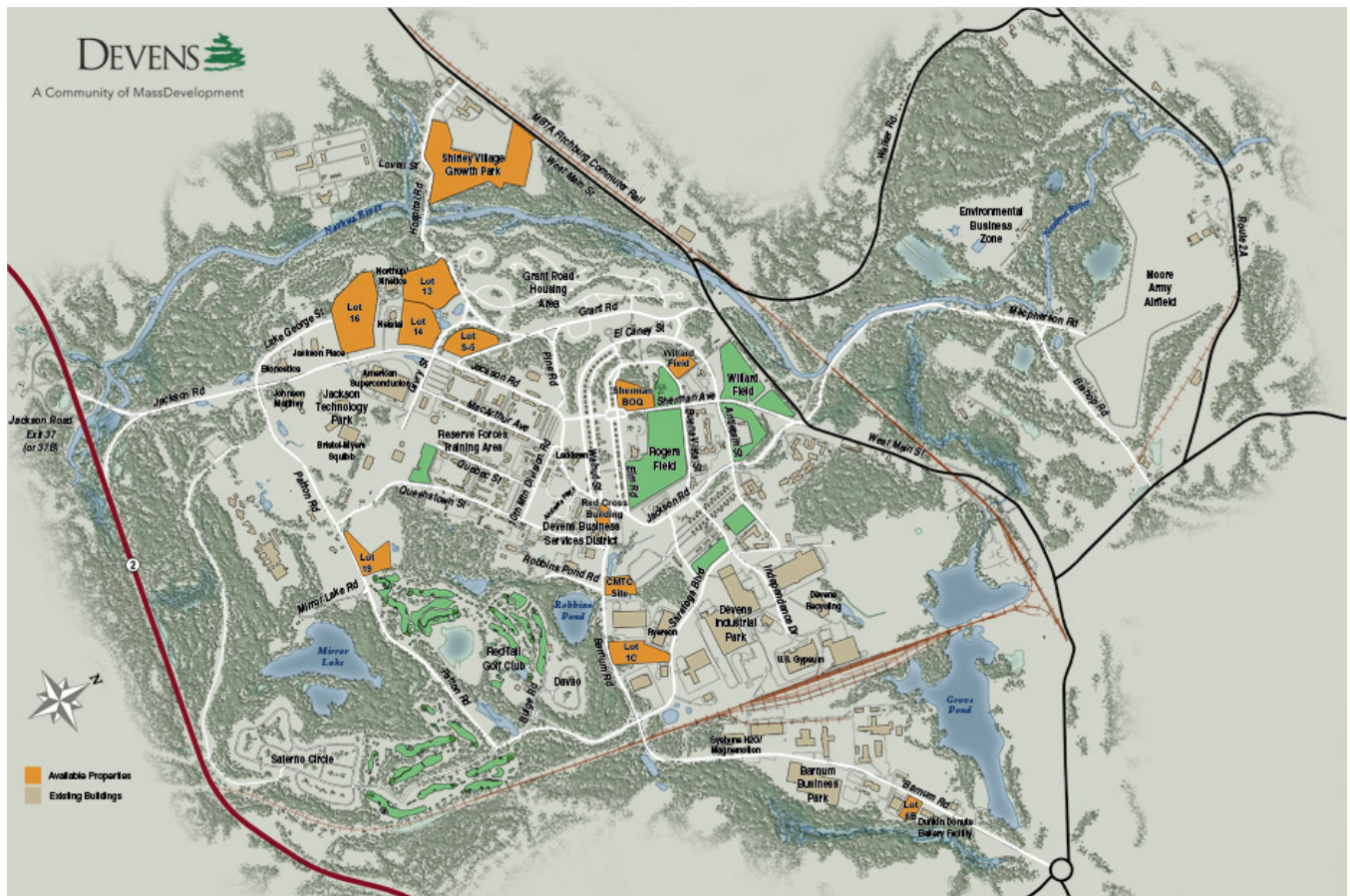
Private firms in Devens can be expected to pay an estimated \$2.95 million in corporate profits tax in 2013, while their employees will pay an estimated \$12.9 million in personal income tax to Massachusetts. Additionally, nonprofit firm employees in Devens will pay an estimated \$658,000 in state personal income tax.

Figure 15: State Corporate Profits and State Personal Income Tax Supported by Private-Sector and Nonprofit Firms in Devens, 2013

	Corporate Profits Tax	Personal Income Tax	Employees	Tax per Employee
Private Sector	\$2,951,715	\$12,928,039	2,641	\$4,895
Nonprofit	n/a	\$658,779	388	\$1,698
Totals	\$2,951,715	\$13,586,818	3,029	\$4,486

Sources: ReferenceUSA, MassDevelopment, MA Labor Market Information ES-202, and MIG, Inc. IMPLAN System.

Appendix A: Map of Devens



Source: Devens Community Website (<http://www.devenscommunity.com/business-industry/master-plan>).

Appendix B: Devens Businesses and Organizations

Company Name	Address
Acorn Technology Systems	94 Jackson Road
Administration and Assessment, Inc.	94 Jackson Road
AMSC (formerly American Superconductor)	64 Jackson Road
Anytime Fitness	20 Andrews Parkway
Axis Engineering Technologies, Inc.	100 Jackson Road
B13 Studio Web Design	
Bionostics	7 Jackson Road
Bristol-Myers Squibb	38 Jackson Road
Comrex	19 Pine Street
DCS Corp.	67 Buena Vista Street
Devens Common Center	31 Andrews Parkway
Devens Day Spa	12 Andrews Parkway
Devens Dry Cleaners	22 Andrews Parkway
Devens Eco-Efficiency Center	33 Andrews Parkway
Devens Enterprise Commission	33 Andrews Parkway
Devens Grill	4 Ryans Way
Devens Recycling Center	45 Independence Drive
Devens United States Post Office	240 Barnum Road
Dunkin' Donuts	20 Andrews Parkway
Dunkin' Donuts Central Production Location	40 Barnum Road
Easysoft Corp	100 Jackson Road
ECO2 Office	10 Andrews Parkway
Eglomise Designs	4 Antietam Street
Evergreen Garden Playschool	270 Barnum Road
Federal Medical Center Devens	42 Patton Road
Fort Devens Museum	94 Jackson Road
Francis W. Parker Charter Essential School	49 Antietam Street
Freedom's Way Heritage Association	100 Sherman Avenue
Greater Boston Toys for Tots	53 Quebec Street
Guild of St. Agnes Day Care	172 Jackson Road
Guilford Motor Express/Pan Am Railways	133 Barnum Road
Hanscom Federal Credit Union	24 Andrews Parkway
Hilton Garden Inn	59 Andrews Parkway
IMPACT Technology Development	100 Jackson Road
Integra Companies	29 Saratoga Boulevard
Integrated Process Technologies, Inc.	8 Charlestown Street
Iron Stone Ventures	27 Quaker Road

Company Name (continued)	Address
J.P. Routhier & Sons, Inc.	256 Ayer Road
Johnson Matthey Pharma Services	25 Patton Road
Laddawn, Inc.	155 Jackson Road
Learning Express	29 Buena Vista Street
Loaves & Fishes Food Pantry	234 Barnum Road
MagneMotion	139 Barnum Road
Massachusetts State Police	59 Buena Vista Street
Massachusetts Veterans Inc.	
MassDevelopment	33 Andrews Parkway
Media News Printing	68 Barnum Road
Media Power	94 Jackson Road
MegaWave	100 Jackson Road
Mount Wachusett Community College / Devens Learning Center	27 Jackson Road
N.B. Kenney	68 Barnum Road
Nashoba Valley Chamber of Commerce	100 Sherman Avenue
New England Sheets	36 Saratoga Boulevard
NFI Industries	66 Saratoga Boulevard
North Middlesex Savings Bank	6 Andrews Parkway
Northrop-Grumman, Xinetics Division	115 Jackson Road
Odic Incorporated	37 MacArthur Avenue
Oxbow Schoolhouse	270 Barnum Road
Parker Hannifin Corp., Nichols Aircraft Div.	14 Robbins Pond Road
Patterson Veterinarian Supply	137 Barnum Road
PCI Synthesis	88 Jackson Road
Pizza Bella	8 Andrews Parkway
Quiet Logistics	66 Saratoga Boulevard
R3 Education, Inc.(includes Saba University and Medical University of the Americas)	27 Jackson Road
Ramsey Rehab Centers	94 Jackson Road
Rapid Refill Gas Station	4 Andrews Parkway
Red Tail Golf Club	15 Bulge Road
Response Microwave	94 Jackson Road
RockTenn	51 Independence Drive
Rofin-Baasel, Inc.	68 Barnum Road
Ryerson	45 Saratoga Boulevard
SABIC Polymershapes	116 Queenstown Street
Saint-Gobain	114 Barnum Road
Seven Hills Family Services	22 Grant Road
Shriver Job Corps	270 Jackson Road
Sirius Integrator, Inc.	100 Jackson Road
Springhill Suites by Marriott	27 Andrews Parkway

Company Name (continued)	Address
TekNewell Engineering	36 Walnut Street
Thomas, Cynthia, C.P.A.	94 Jackson Road
Tighe Logistics Group	133 Barnum Road
Transitions at Devens	101 Sherman Avenue
United Native American Cultural Center	29 Antietam Street
United Water (formerly Earth Tech Inc.)	9 Cook Street
US Intermodal	133 Barnum Road
USG Corporation	50 Independence Drive
W.H. Nichols Employees Federal Credit Union	14 Robbins Pond Road
Waiteco Machine, Inc.	18 Saratoga Boulevard

Sources: ReferenceUSA and MassDevelopment.

Appendix C: Devens Businesses and Organizations by Industry Type

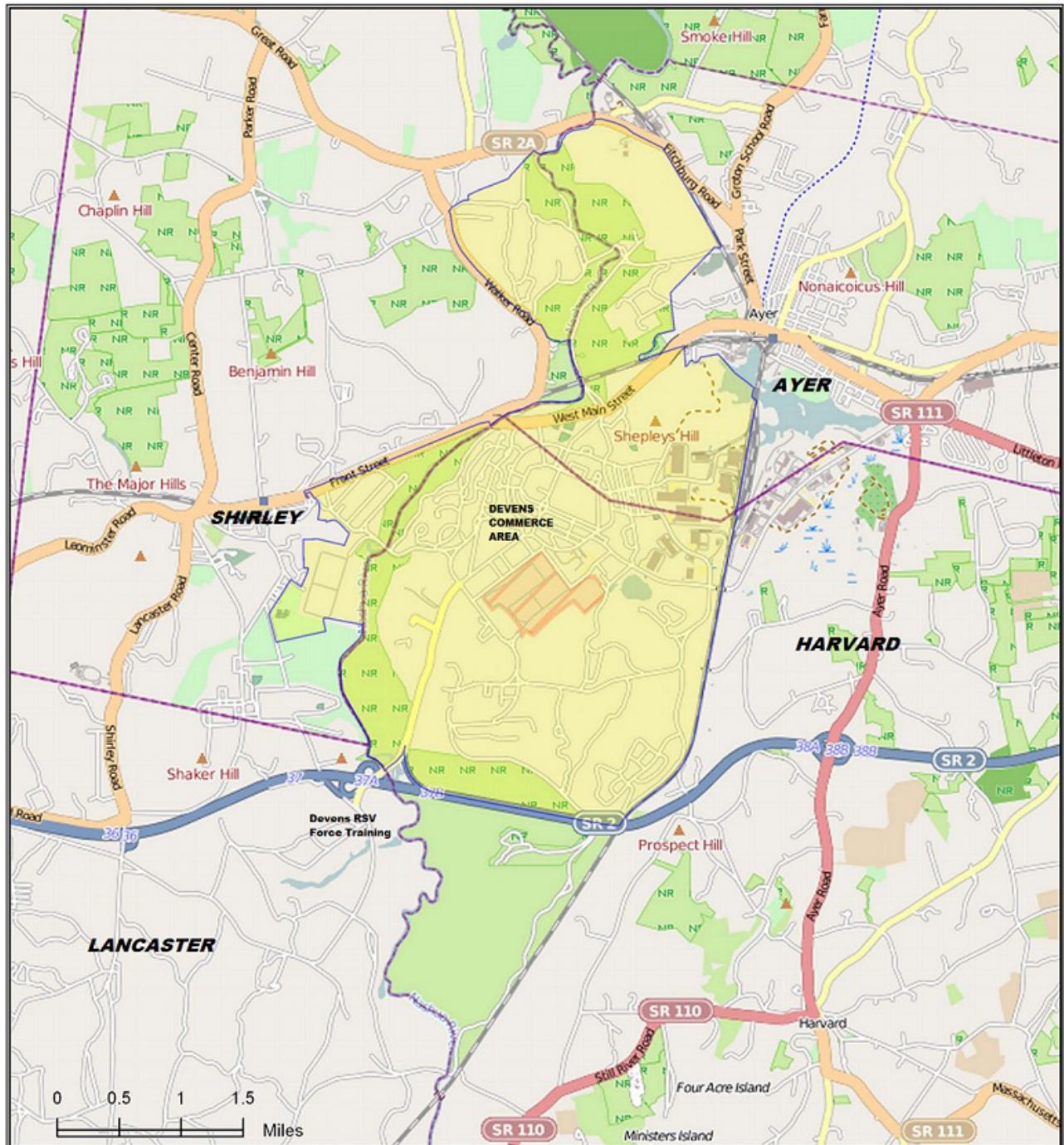
Industry/Establishment	Establishments	Employees
Government	5	605
Public Administration	4	601
Devens Enterprise Commission		
Federal Medical Center Devens		
Massachusetts State Police		
MassDevelopment		
Transportation and Warehousing	1	4
Devens United States Post Office		
Nonprofit	19	388
Arts, Entertainment, and Recreation	1	1
Fort Devens Museum		
Educational Services	5	301
Francis W. Parker Charter Essential School		
Mount Wachusett Community College / Devens Learning Center		
Oxbow Schoolhouse		
R3 Education, Inc. (includes Saba University and Medical University of the Americas)		
Shriver Job Corps		
Finance and Insurance	2	7
Hanscom Federal Credit Union		
W.H. Nichols Employees Federal Credit Union		
Health Care and Social Assistance	5	62
Evergreen Garden Playschool		
Greater Boston Toys for Tots		
Guild of St. Agnes Day Care		
Seven Hills Family Services		
Transitions at Devens		
Other Services (except Public Administration)	3	12
Loaves & Fishes Food Pantry		
Massachusetts Veterans Inc.		
Nashoba Valley Chamber of Commerce		
Professional, Scientific, and Technical Services	1	1
Devens Eco-Efficiency Center		
Public Administration	2	4
Freedom's Way Heritage Association		
United Native American Cultural Center		

Industry/Establishment (continued)	Establishments	Employees
Private Sector	63	2,641
Accommodation and Food Services	5	139
Devens Grill		
Dunkin' Donuts		
Hilton Garden Inn		
Pizza Bella		
Springhill Suites by Marriott		
Administrative and Support and Waste Management and Remediation Services	2	23
Devens Recycling Center		
ECO2 Office		
Arts, Entertainment, and Recreation	3	65
Anytime Fitness		
Devens Day Spa		
Red Tail Golf Club		
Construction	1	75
N.B. Kenney		
Educational Services	1	2
Iron Stone Ventures		
Finance and Insurance	1	3
North Middlesex Savings Bank		
Health Care and Social Assistance	1	4
Ramsey Rehab Centers		
Information	1	10
Easysoft Corp		
Management of Companies and Enterprises	1	30
Learning Express		
Manufacturing	14	1,216
Bionostics		
Bristol-Myers Squibb		
Comrex		
Dunkin' Donuts Central Production Location		
Eglomise Designs		
Laddawn, Inc.		
Media News Printing		
New England Sheets		
Northrop-Grumman, Xinetics Division		
Parker Hannifin Corp., Nichols Aircraft Div.		
RockTenn		
SABIC Polymershapes		
Saint-Gobain		
Waiteco Machine, Inc.		
Other Services (except Public Administration)	1	2
Devens Dry Cleaners		

Industry/Establishment (continued)	Establishments	Employees
Private Sector (continued)		
Professional, Scientific, and Technical Services	16	319
Acorn Technology Systems		
Administration and Assessment, Inc.		
Axis Engineering Technologies, Inc.		
B13 Studio Web Design		
DCS Corp.		
IMPACT Technology Development		
Integrated Process Technologies, Inc.		
Johnson Matthey Pharma Services		
MagneMotion		
Media Power		
MegaWave		
Odic Incorporated		
PCI Synthesis		
Response Microwave		
TekNewell Engineering		
Thomas, Cynthia, C.P.A.		
Real Estate and Rental and Leasing	1	65
Devens Common Center		
Retail Trade	1	5
Rapid Refill Gas Station		
Transportation and Warehousing	6	268
Guilford Motor Express/Pan Am Railways		
NFI Industries		
Quiet Logistics		
Tighe Logistics Group		
US Intermodal		
USG Corporation		
Utilities	1	3
United Water (formerly Earth Tech Inc.)		
Wholesale Trade	7	412
AMSC (formerly American Superconductor)		
Integra Companies		
J.P. Routhier & Sons, Inc.		
Patterson Veterinarian Supply		
Rofin-Baasel, Inc.		
Ryerson		
Sirius Integrator, Inc.		
Grand Total	87	3,634

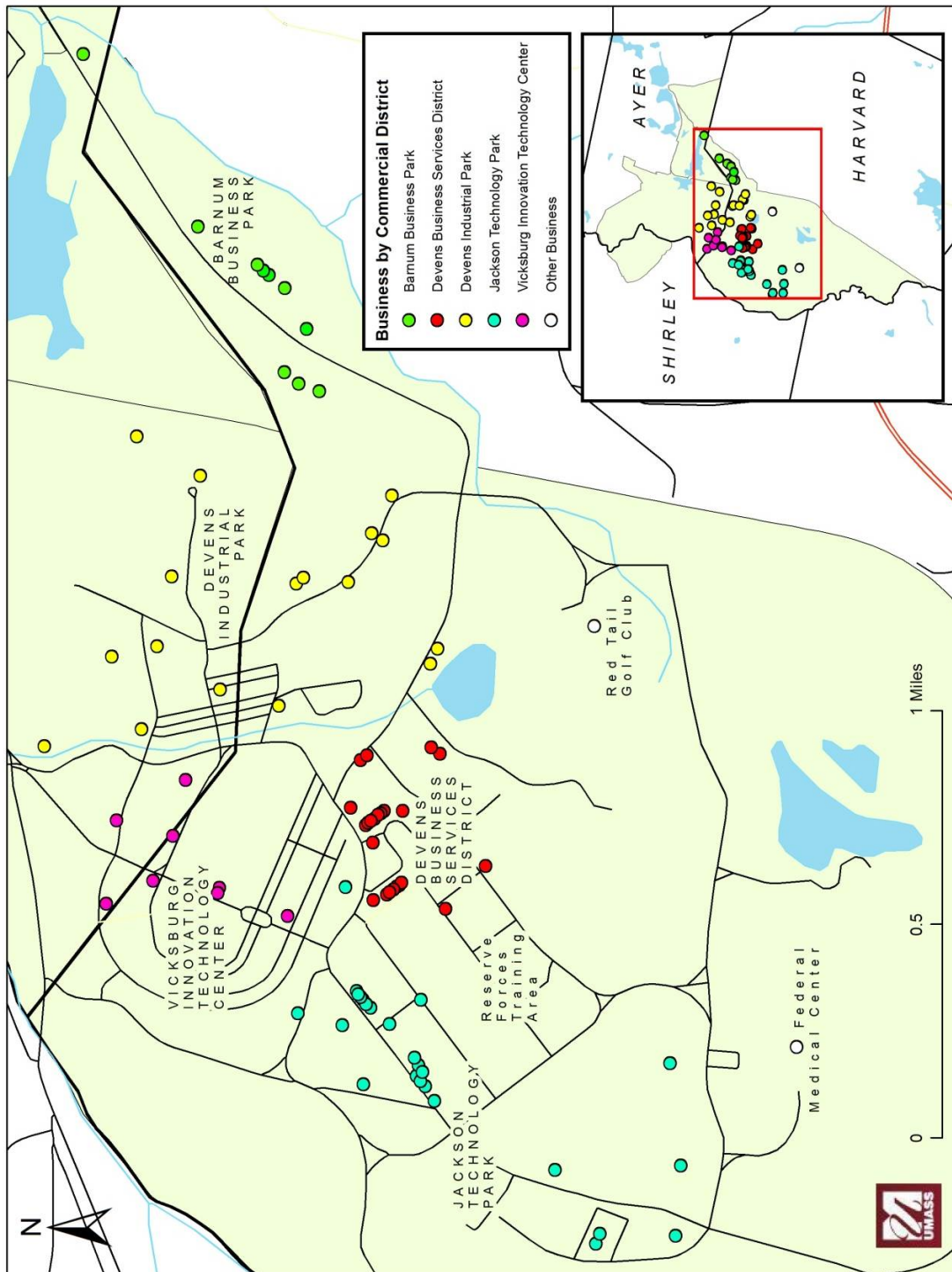
Sources: ReferenceUSA and MassDevelopment.

Appendix D: Devens, Massachusetts



Source: UMass Donahue Institute, produced with ESRI Community Analyst & Open Space Maps, January 2012.

Appendix E: Devens Business Map



Sources: MassGIS, ReferenceUSA, MassDevelopment, and private companies.

Appendix F: Methodology

Introduction and Scope of Work

At the request of MassDevelopment, the UMass Donahue Institute (UMDI) conducted an analysis to provide a current look at enterprises in Devens, including an assessment of the economic value of Devens business activities. The work involved collecting data to provide an updated inventory of firms and organizations in Devens and researching typical wages for the represented industries. The economic analysis, based on the existing employment base in Devens, includes private, nonprofit, and governmental activities. UMDI worked with MassDevelopment to collect up-to-date employment counts for each establishment in Devens. Employment data populated an economic impact model designed to assess economic contributions flowing from private and nonprofit organizations. UMDI conducted a similar study of Devens businesses in 2012.⁷ The current study uses slightly altered methods due to the unavailability of one key data source used in the prior study (D&B Marketplace, which is no longer produced) and the goal of streamlining the methodology for reproducibility in future studies.

⁷ University of Massachusetts Donahue Institute. *Business and Organizations Located in Devens, Massachusetts Profile and Economic Contributions*. 2012.

Devens Establishment Database Development

UMDI created a comprehensive inventory of businesses, organizations, and other entities in Devens. Staff created an initial list of companies and organizations using data collected from <http://www.devenscommunity.com/business-industry/business-listing> and a location-based search in ReferenceUSA. MassDevelopment reviewed the list of organizations for accuracy and completeness. Employment counts and industrial classifications were retrieved from ReferenceUSA or, where not available or where data quality was a consideration, were obtained directly from the establishments by MassDevelopment. Average wages for each industry came from the Massachusetts Labor Market Information ES-202 series. Direct, indirect, and induced economic contributions were estimated based on employment using the IMPLAN input-output system. Each of these data sources is described in greater detail below.

Data Sources

ReferenceUSA

ReferenceUSA is a proprietary data source providing business information on more than 14 million U.S. businesses, including name, address, employment, and industry classification among other pieces of information. Business listings are updated from public and private sources. Business information is updated by phone on a rolling basis, and therefore timeframes for measurement using this source are approximate. UMDI used ReferenceUSA as one of a number of data sources to contribute to a complete company listing, employment count, and industrial classification for Devens businesses.

QCEW/ Massachusetts Labor Market Information ES-202

Quarterly Census of Employment and Wage (QCEW/ES-202) is a cooperative program between the U.S. Bureau of Labor Statistics and state agencies. Data are derived from reports filed by all employers subject to unemployment compensation laws, both state and federal. Industry employment and payroll information is produced both quarterly and annually for the state, labor market areas, workforce investment areas, municipalities, and counties. UMDI used Massachusetts ES-202 data to provide average annual wages and total wages by industrial classification for Massachusetts. The most recent data available at the time of the preparation of this report covered the third quarter of 2012.

MIG, Inc. IMPLAN Systems

The IMPLAN modeling system, a widely used proprietary software, combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with regional employment and wage data. The software then constructs quantitative models of the flow of goods and services among businesses that purchase materials and services from one another and from employees who use increased earnings to purchase additional goods and services from local businesses. UMDI used IMPLAN to estimate direct, indirect, and induced economic contributions and state income and corporate profits tax payments by sector (private and nonprofit) for Devens. The most recent IMPLAN model and data representing trade flows between industries available at the time of the preparation of this study was 2011. Employment inputs for the IMPLAN model were for 2013.

Economic and Tax Contributions Methodology

This study provides estimates of economic contributions from all spending for both private sector and nonprofit firms. Following standard practice, we excluded government firms since we assumed these contributions would be more likely to continue in the form of alternate economic activity if the specific government entities in Devens relocated.

UMDI coded firms in Devens according to IMPLAN's proprietary industry sector scheme among the 440 available sectors based on their assigned NAICS codes. The model used employment by industry to estimate economic and tax contributions, including indirect and induced contributions and employment.

Key model assumptions include:

1. Devens firms purchase goods and services from within Massachusetts in the same share as other businesses in the same IMPLAN sector.
2. The share of Devens employees who live in the Commonwealth is the same as the IMPLAN model default for all industries in Massachusetts (resulting in a negligible portion of wages from Devens leaving the Commonwealth because they are spent primarily in neighboring states by residents of neighboring states who work in Devens).
3. Employee output (productivity) is similar for Devens businesses as for other Massachusetts businesses in the same industry sector.