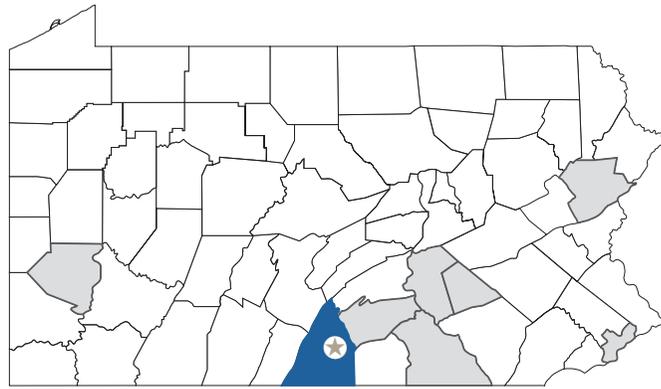


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**PENNSYLVANIA MILITARY INSTALLATIONS // IMPACTS**

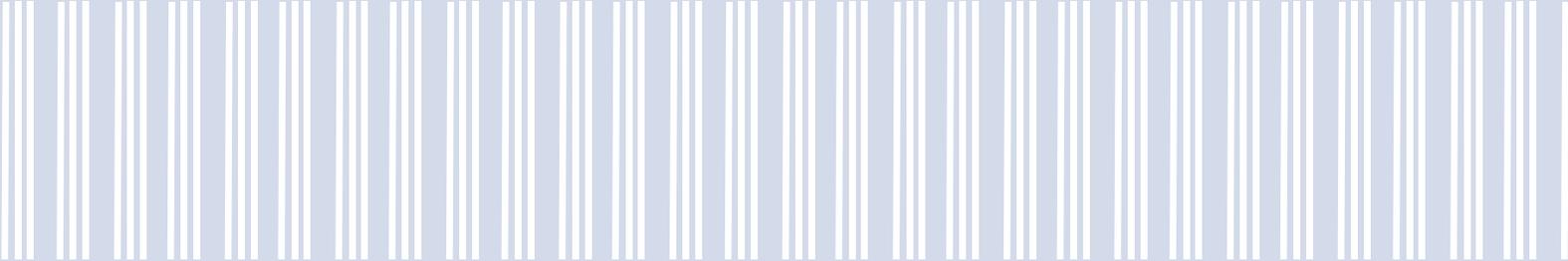
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# LETTERKENNY ARMY DEPOT

CHAMBERSBURG, FRANKLIN COUNTY





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**June 2018**

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LETTERKENNY  
ARMY DEPOT

This report is part of the Pennsylvania Military Community Enhancement Commission-sponsored study of the economic impacts of Pennsylvania’s military and defense installations. The aim of the project is to aid the Commission and the Commonwealth of Pennsylvania in understanding the economic and strategic value of its major military installations regionally and nationally, as well as their ties to surrounding communities and Pennsylvania industry.

## INTRODUCTION

**A**s Letterkenny Army Depot celebrates its 75th anniversary, its primary purpose remains vital to the U.S. military: to maintain the skills and facilities necessary for a wartime surge. The depot is located on 18,668 acres adjacent to the Borough of Chambersburg and encompasses parts of Greene, Hamilton, and Letterkenny townships in Franklin County. The depot employs over 3,000 people, including government employees, military personnel, and private contractors.

**Its main workload is three-fold:**

**1. Weapon systems overhaul and/or recapitalization — essentially rebuilding a system or vehicle so that it is like new**

**2. “Reset” of weapon systems — quicker and less comprehensive repairs but still returning a system or vehicle to serviceable condition, and**

**3. The development of new weapon systems**

The depot currently supports the following weapon systems: Patriot, Avenger, RG-31, and Force Provider. Additionally, the depot performs various engineering tasks and provides inventory and storage support. Letterkenny Munitions Center is a major tenant of the depot, responsible for numerous tasks related to conventional ammunition and missiles, including maintenance, storage, and regional and global distribution. ★

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**MISSION: Letterkenny Army Depot develops and delivers materiel readiness for Air Defense forces of the U.S. and its international partners and builds combat power for combined and joint route clearance operations worldwide.**

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## BACKGROUND & HISTORY

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Letterkenny was established in 1941 as part of the War Department's plans to create 12 new ordnance depots to deal with a surge in war materiel. Letterkenny Township was chosen based on its established infrastructure and its location, which was close to — and a safe distance from — the eastern seaboard and Washington, D.C. The number of employees at the depot continued to grow even after WWII (6,5000 people in 1950), as did its vehicle storage and processing work. During the 1950s, the depot also began to work in electronics and guided missile maintenance, and in 1954 it became a permanent military installation. During the following decades, the depot morphed into the multi-faceted installation it is today, performing many functions related to supply, maintenance, and ammunition. Its missile-related mission was solidified in 1992, when the depot was chosen to be the center of Tactical Missile Systems in the Army, Navy, Air Force, and Marines. In the post-9/11 era, the depot has been heavily involved in retro-

fitting and resetting combat vehicles and recapping Patriot Missiles.<sup>1</sup>

As a result of previous Base Realignment and Closure (BRAC) rounds, Letterkenny has seen changes — positive and negative — to its workload and mission. In 1995, the BRAC Commission realigned some of Letterkenny's workload to the Anniston Army Depot in Alabama, as well as to Tobyhanna Army Depot in Pennsylvania. It also expanded Letterkenny's storage and disassembly missions. Letterkenny Industrial Development Authority (LIDA) was created in response to BRAC changes and charged with redeveloping almost 1,500 acres turned over to the community as a result of the realignment. The authority continues to support the depot through a variety of agreements and even leases former military space to the depot.<sup>2</sup> In the most recent round of BRAC (2005), Letterkenny Army Depot gained from the process, which resulted in an expansion of missile maintenance operations and tactical vehicle work. 🌟

**TABLE 1**

**MAJOR CHANGES – LETTERKENNY ARMY DEPOT<sup>3</sup>**

<b>BRAC 1995</b>	<p>Recommended realignment of the towed and self-propelled combat vehicle mission to Anniston Army Depot, Alabama.</p> <p>Recommended transfer of the missile guidance/control system workload to Tobyhanna Army Depot, Pennsylvania, or to private sector commercial activities.</p> <p>Recommended expansion of conventional ammunition storage and tactical missile disassembly and storage missions, including munitions for all services.</p>
<b>BRAC 2005</b>	<p>Recommended expansion of missile maintenance operations by consolidating tactical missile workload from Red River Army Depot and Marine Logistics Center – Barstow, CA.</p> <p>Recommended expansion of tactical vehicle workload when missions transferred from Rock Island Arsenal.</p> <p>After missions moved to Letterkenny, the workforce increased by approximately 160.</p>

*In July 2016, Letterkenny Army Depot rolled out the latest variant of the RG31, with improvements including engine and transmission upgrades, independent suspension, enhanced night visibility, and an armored gunner's hatch. The depot is scheduled to produce 929 of these RG31s through 2020.*

*Image courtesy of Letterkenny Army Depot*



## ECONOMIC IMPACT

The IMPLAN model was used to estimate the total economic impact of Letterkenny Army Depot within the state of Pennsylvania. The IMPLAN model estimates the direct, indirect, and induced impacts that accrue within Pennsylvania because of activity generated by depot operations and major tenants co-located at the installation. Direct impacts are the employment and spending associated with all operations located at the depot itself, while indirect impacts, sometimes called intermediate impacts, are generated by the supply chain requirements and linkages of the activity being analyzed. Induced economic impacts derive from the spending patterns of employees and service members.

This economic impact analysis quantifies the cumulative impact on employment, economic output, and value added production generated by operations at Letterkenny Army Depot. This could be interpreted as the result if the installation was disestablished, and all of its tenant commands relocated outside of Pennsylvania. Staff of Letterkenny Army Depot provided economic data for the 2015–16 federal fiscal year; results reflect economic impact over that period.

The majority of employees at the depot are full-time civilians who are a mix of permanent federal employees and contractors. The specialized nature of work performed by the depot is reflected in the IMPLAN inputs for this analysis; civilian workers were

**TABLE 2**  
**ECONOMIC IMPACT SUMMARY – LETTERKENNY ARMY DEPOT**

	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
<b>FRANKLIN COUNTY</b>	<b>Direct Effect</b>	2,881	\$ 241,239,385	\$ 507,506,489	\$ 1,460,589,845
	<b>Indirect Effect</b>	1,077	\$ 47,269,968	\$ 70,047,010	\$ 138,941,725
	<b>Induced Effect</b>	1,357	\$ 51,676,176	\$ 86,258,510	\$ 150,613,766
	<b>Total Effect</b>	5,315	\$ 340,185,529	\$ 663,812,009	\$ 1,750,145,336
<b>PENNSYLVANIA TOTAL</b>	<b>Direct Effect</b>	2,881	\$ 241,239,385	\$ 507,506,489	\$ 1,460,589,845
	<b>Indirect Effect</b>	1,869	\$ 117,291,885	\$ 175,985,628	\$ 353,737,820
	<b>Induced Effect</b>	1,894	\$ 80,838,273	\$ 134,121,735	\$ 234,184,207
	<b>Total Effect</b>	6,645	\$ 439,369,542	\$ 817,613,853	\$ 2,048,511,872

TABLE 3

TOP 10 INDUSTRIES AFFECTED – LETTERKENNY ARMY DEPOT

SECTOR	DESCRIPTION	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
301	Electronic computer manufacturing	719	\$ 63,230,311	\$ 236,477,652	\$ 831,506,327
315	Search, detection, and navigation instruments manufacturing	715	\$ 63,017,091	\$ 103,800,184	\$ 246,892,247
293	Industrial truck, trailer, and stacker manufacturing	715	\$ 63,648,405	\$ 95,760,494	\$ 302,394,134
395	Wholesale trade	523	\$ 47,936,359	\$ 86,977,337	\$ 134,943,905
429	Satellite, telecommunications resellers, and all other telecommunications	328	\$ 25,050,733	\$ 25,843,031	\$ 41,046,907
416	Warehousing and storage	295	\$ 14,679,357	\$ 17,477,369	\$ 30,423,218
465	Business support services	224	\$ 9,805,253	\$ 9,149,163	\$ 13,836,590
501	Full-service restaurants	170	\$ 3,687,839	\$ 4,143,773	\$ 8,006,032
62	Maintenance and repair construction of nonresidential structures	163	\$ 9,899,550	\$ 12,313,253	\$ 26,513,812
461	Management of companies and enterprises	156	\$ 23,120,215	\$ 28,070,468	\$ 42,293,944

Sector reflects IMPLAN industry category; Source: University of Pittsburgh Center for Social and Urban Research, 2018

categorized as being employed in a composite mix of industry sectors. Table 2 is a summary of economic impacts in Franklin County and Pennsylvania as a whole, broken down by direct, indirect, and induced sources.

- Overall, Letterkenny Army Depot generated 6,645 jobs and over \$2 billion in overall economic output in 2016. These jobs generate over \$439 million in total labor income annually.
- Letterkenny Army Depot generated an estimated \$817 million in Gross Regional Product (GRP), or value added production, to the economy of Pennsylvania.

The economic impact of Letterkenny Army Depot within Pennsylvania reflects the broad range of operations at the installation. The industrial capacity of the depot incorporates repair, maintenance, and manufacturing capacity comparable to a diverse mix of civilian defense industries. This generates an economic impact across a similarly diverse range of industries. Table 3 highlights the top 10 industries impacted by Letterkenny Army Depot as estimated by the IMPLAN model. 🌟

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## COMPETITIVE ASSESSMENT

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The sections that follow originate from an analysis of strengths, weaknesses, opportunities, and threats (SWOT) at Letterkenny Army Depot. Strengths and weaknesses include attributes, assets, or factors that are internal to the installation. Threats are external factors that are harmful to, or create vulnerabilities for, the installation. Opportunities offer ways to mitigate threats and weaknesses and/or reinforce and expand on the installation’s strengths. The SWOT analysis is summarized in Table 4, and aspects of the analysis are described throughout the following sections.

Letterkenny Army Depot benefits from two critical competitive strengths: capabilities and location. Letterkenny Army Depot’s capabilities stem from the vital functions that it performs for the military and the infrastructure and people in place to successfully carry

out those functions. Letterkenny Army Depot is one of just four depots/ammunitions plants that are part of the Army’s power-projection platform in the U.S. Its work to maintain equipment, facilities, and skills in times of diminished combat operations provides vital national surge capacity for the military.

Further, Letterkenny Army Depot’s skillsets and infrastructure — including storage, radar, test and diagnostic equipment — make Letterkenny a “go-to” place for developing new missile systems. The depot recently acquired a new mission as part of an Army pilot project. The depot will design and build a new short-range air defense system and its launch platform, the Multi-Mission Launcher (MML). The MML is designed to engage a variety of air threats, from cruise missiles to mortars.<sup>4</sup> Compared to the typical process of contracting the work to a commercial original equipment

**TABLE 4**  
**SWOT THEMES – LETTERKENNY ARMY DEPOT**

**STRENGTHS**

- **Capabilities**
- **Location**

**WEAKNESSES**

- **Aging Buildings**

**OPPORTUNITIES**

- **External Partnerships**
- **Increased Visibility**
- **Expanded Business and Logistics Cluster**

**THREATS**

- **Federal Budget Sequestration**
- **Privatization**

*Letterkenny Army Depot operates a mission-specific weld test and training program through which welders are qualified to American Welding Society standards.*

*Image courtesy of Letterkenny Army Depot*



manufacturer (OEM), the project is expected to save the Army time and money and will result in Army ownership of the intellectual property.

The depot continues to look for ways to upgrade its facilities, as many of its buildings were constructed in the 1940s and 1950s. For example, at the end of 2016, the depot broke ground on a new \$15 million component rebuild facility, which will allow it to centralize metal treatment facilities currently spread throughout the installation. The project is funded through the Army's military construction (MILCON) program and should be complete in 2018.

Letterkenny has been named a Center of Industrial and Technical Excellence (CITE) three times. In 2001, the Secretary of the Army recognized Letterkenny as the CITE for Air Defense and Tactical Missile Ground Support Equipment, in 2005 for Mobile Electric Power Generation Equipment, and in 2012 for Route Clearance Vehicles and PATRIOT Missile Recertification.<sup>5</sup>

The depot has been recognized with many awards, including ten Shingo Medallions for excellent work in specific areas such as the PATRIOT Missile Launcher

and Biological Integrated Detection Systems. During the 2005 BRAC process, Letterkenny was considered number one in Military Value for Tactical Wheeled Vehicles. The Secretary of the Army has also recognized Letterkenny for its environmental restoration and sustainability efforts.<sup>6</sup>

The depot's location in Chambersburg is ideal for a number of reasons. First, it combines a rural setting with close proximity to major population centers. The rural setting is necessary for the Munitions Center's ammunition storage, but the proximity to a multi-modal transportation network allows for convenient and efficient transportation of ammunition and equipment. The depot has direct access to the ports of Philadelphia and Baltimore, and rail lines link Letterkenny to Sunny Point, North Carolina, where missiles are shipped overseas. In addition to rail, the highway network accessible from the installation is extensive.

Second, the depot is part of a defense sector concentration that is critical to national defense as well as the economy of the region; the installation is situated

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within a 75 mile radius of Ft. Indiantown Gap, the Army War College, Naval Support Activity in Mechanicsburg, Defense Logistics Agency Susquehanna, and Fort Detrick in Maryland.

Third, these location advantages also aid the Letterkenny workforce. The skill sets in demand at the depot — from repair and fabrication specialties like avionics and electronics to information technology to logistics — exist in the surrounding area, as does a strong workforce pipeline through schools and training centers in the region, which is detailed further below.

The Washington, DC locality pay rate now applies to Chambersburg, which means that the depot uses the DC General Schedule scale. As with nearby Defense Logistics Agency Susquehanna, this is beneficial for recruitment efforts, but may be a double-edged sword in that it also increases the cost of doing business. Additionally, due to federal budget sequestration, the number of permanent employees

the depot can bring on is capped, and its ability to get Tables of Distribution and Allowances approved and funded is “frozen in time,” according to depot leadership. The depot has had to resort to large scale contracting as a result, and they have not been able to bring on administrative positions. Relying on contracting (or temporary employees) presents challenges in terms of keeping up skill sets and maintaining continuity, as it can take years to develop skillsets in some areas, such as electronics.

An additional threat, one that Letterkenny shares with other depots and logistics centers in Pennsylvania, is that of privatization of parts of its workload. Although this is an ongoing concern, recent debates at the federal level over the existing ban on A-76 competitions have made it more acute.<sup>7</sup> A-76 competitions would allow private contractors to bid on work that federal employees are currently carrying out. ⚡



*Using a high volume, low pressure paint gun, a depot painter sprays chemical agent resistant coating over an AN/TWQ-1 Avenger gunner's turret. Letterkenny's advanced paint mixing system reduces labor, cost, and waste. The materials used are at the lowest volatile organic compounds (VOC) that still meet the military specifications and are more environmentally friendly.*

*Image courtesy of Letterkenny Army Depot*

Letterkenny is establishing an on-depot, four-year recapitalization program for the Patriot equipment belonging to the Netherlands — one of the United States' first foreign military sales Patriot partners. The program is one of the Army Materiel Command's strategic missions in support of global readiness.

Image courtesy of Letterkenny Army Depot



## LETTERKENNY ARMY DEPOT & THE FRANKLIN COUNTY REGION

Letterkenny Army Depot's ties to local and regional schools and its partnerships with the Franklin County Area Development Corporation (FCADC) and LIDA serve to strengthen its workforce and facilities. FCADC was established in the late 1980s, and its affiliate "Team Letterkenny" actively serves as the depot's Local Defense Group.

The depot has several educational partnerships to assist in tailored recruitment and training efforts. Although Chambersburg has no local community college, the depot partners with Franklin County Career and Technology Center (a vocational high school) and several post-secondary and technical schools in surrounding communities, such as York College, Penn State University, Harrisburg Area Community College, and Hagerstown Community College. Further, FCADC recently constructed a welding training center that, among other things, will help with training employees of Bowhead, a depot contractor.

Turning to partnerships with the private sector is an especially attractive option in an environment in which federal MILCON funds are not guaranteed or take years to come through. Depot leadership, aided by the Pennsylvania Military Community Enhancement Commission, is currently working with LIDA on an innovative public/private partnership that could be a model for the state and across the Department of Defense (DoD). Using the Pennsylvania Keystone Opportunity Zone program, LIDA plans to attract a private developer to construct a new 700,000 square foot facility on post, which the Army will lease. The Keystone Opportunity Zone program encourages the development of specific underdeveloped and underutilized areas by eliminating certain state and local taxes. The partners expect the plan to result in cost savings for the Army along with a large, modern space with high ceilings and rail access. The project would consolidate work currently taking place in separate buildings and improve the depot's efficiency. ★

An air conditioning equipment mechanic tightens the bleeder cap on a Revision III Patriot cooling liquid electron tube (CLET).

Image courtesy of Letterkenny Army Depot



## LOOKING FORWARD

Even as Letterkenny Army Depot stays focused on maintaining and building combat power for the U.S. and its international partners, its leadership is “making changes now that will ensure its relevance to the Army for decades to come and will ensure the U.S. remains the pre-eminent land force in the world.”<sup>8</sup> As it looks to the future, the depot will benefit from continuing to strengthen external partnerships and visibility, and from pursuing expanded business and logistics cluster opportunities.

- The depot’s partnerships with FCADC, LIDA, and local and state government are crucial to Letterkenny’s success. In particular, they are critical partners as Letterkenny addresses its aging buildings. Letterkenny leadership should also continue to engage with external partners in publicizing its work and achievements. From hosting high-level military personnel to preparing remarks for federal representatives to providing professional and well-organized facility tours, the importance of Letterkenny’s outreach and public awareness efforts should not be understated.
- Ten to twenty percent of the depot’s annual revenue comes from partnerships with OEMs to produce weapon systems, which partners like Raytheon, Lockheed Martin, and AAI then sell to foreign militaries. An increase in foreign military sales (FMS) at Letterkenny comes amidst expectations that the

DoD market for FMS will grow,<sup>9</sup> indicating that expansion in this market may be a promising opportunity for Letterkenny. The depot could also continue to build on organic industrial base work, as it has done with the multi-mission launcher pilot project.

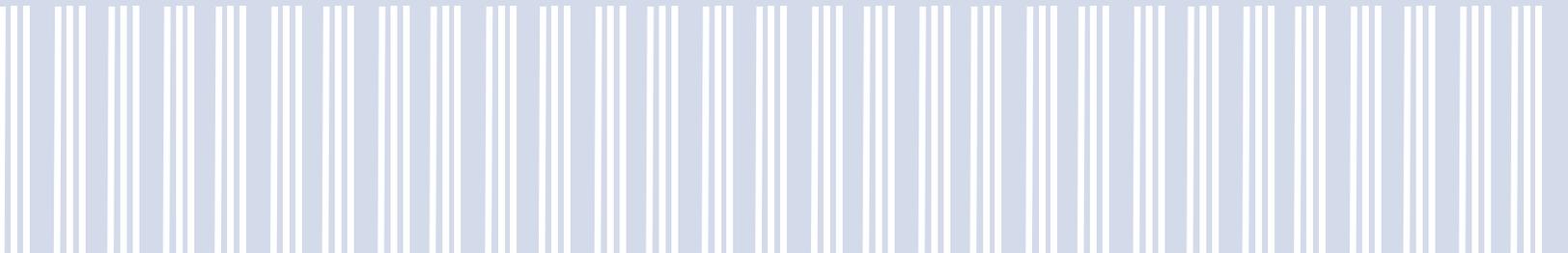
- Installation leadership might consider re-vamping industry day in order to support contracting with local businesses and enhance community integration. In 2015, FCADC stated that part of its 2016 plan of action would be to “Avail applicable economic development resources to defense contractors seeking to do business with [Letterkenny Army Depot].”<sup>10</sup> Given this priority, FCADC would be an interested and important partner.
- Building on groundwork laid in 2009,<sup>11</sup> Letterkenny is well-positioned to tap into a Pennsylvania Logistics Center of Excellence, which would build a common orientation around the state’s concentrated strength in transportation, distribution, and logistics. Such a center would support new education, training, and business development opportunities and could provide Letterkenny with enhanced opportunities to leverage its strategic reserve capacity supporting a global military force. Additionally, it could create opportunities to aid Letterkenny in making connections between its internal manufacturing and technological innovations and external supply chain, education, and local economic development resources.



## Notes

- <sup>1</sup> All details in this paragraph come from: "History of Letterkenny," Letterkenny Army Depot, accessed January 5, 2018, [letterkenny.army.mil/history.html](http://letterkenny.army.mil/history.html)
- <sup>2</sup> Dan Cohen, "County Economic Development Director Underscores Challenges in Finding New Uses for Closed Bases," *Association of Defense Communities*, March 14, 2017
- <sup>3</sup> Defense Base Closure and Realignment Commission, *2005 Defense Base Closure and Realignment Commission Report*, vol. 2, 2005; *1995 Report to the President*, 1995; Pennsylvania Military Community Enhancement Commission, *2015 Annual Report*; Pennsylvania Base Development Committee, *Pennsylvania Military Installations Reference Manual*, March 2009
- <sup>4</sup> John Andrew Hamilton, "New Air Defense System Under Development Tested at WSMR," May 26, 2015, [army.mil/article/149241/New\\_air\\_defense\\_system\\_under\\_development\\_tested\\_at\\_WSMR](http://army.mil/article/149241/New_air_defense_system_under_development_tested_at_WSMR)
- <sup>5</sup> "History of Letterkenny," Letterkenny Army Depot, accessed January 5, 2018, [letterkenny.army.mil/history.html](http://letterkenny.army.mil/history.html)
- <sup>6</sup> "History of Letterkenny"
- <sup>7</sup> Mark Rockwell, "Will Trump and Mulvaney Bring Back A-76?" FCW, December 22, 2016
- <sup>8</sup> Deacon Maddox, "Letterkenny Army Depot," May 2017, (Unpublished letter to Congressional Representative)
- <sup>9</sup> "U.S. DoD Foreign Military Sales Market, Forecast to 2021," Frost & Sullivan, February 15, 2017, [frost.com/sublib/display-report.do?id=K166-01-00-00-00](http://frost.com/sublib/display-report.do?id=K166-01-00-00-00)
- <sup>10</sup> Franklin County Area Development Corporation, "2016... Embracing the Future. 2016 Annual Report," December 2016
- <sup>11</sup> Pennsylvania Base Development Committee, "PA 2020, A Strategy for the future of the Military in the Commonwealth of Pennsylvania," 2009





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**This report is part of a larger study of the economic and community impacts of Pennsylvania's military and defense installations. Visit the Pennsylvania Military Community Enhancement Commission's website at [www.dced.pa.gov/pmcec](http://www.dced.pa.gov/pmcec) to see other installation-specific reports and a statewide report.**

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PENNSYLVANIA  
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# LETTERKENNY ARMY DEPOT

PENNSYLVANIA MILITARY INSTALLATIONS // IMPACTS

