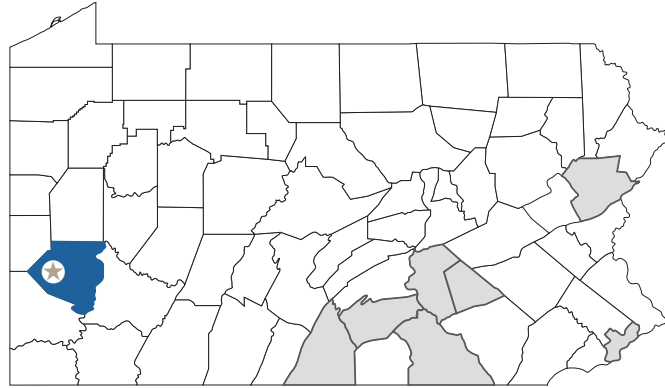


PENNSYLVANIA MILITARY INSTALLATIONS // IMPACTS



911TH AIRLIFT WING

PITTSBURGH INTERNATIONAL AIRPORT / AIR FORCE RESERVE





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911TH AIRLIFT WING

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 military installations regionally and nationally, as well as their ties to surrounding communities and Pennsylvania industry.

INTRODUCTION

The **911th Airlift Wing** of the Air Force Reserve is located in the borough of Coraopolis, approximately 20 miles from the City of Pittsburgh in Allegheny County, and is co-located with the Pittsburgh International Airport. The 911th Airlift Wing is part of the U.S. Air Force Reserve Command, and the wing is the principal Air Force Reserve unit located within Pennsylvania. The Air Force Reserve Command at the 911th includes military and civilian employees, many traditional reservists, and air reserve technicians. The installation covers 115 acres and contains 379,851 square feet of office and workspace.

In September 2016, Congress approved \$85 million to bring an Air Force squadron of eight C-17 cargo planes to the 911th Airlift Wing. The C-17s will replace the existing eight C-130 planes in the coming years, enabling the 911th to enhance and expand its capabilities and capacities into the future.

The upgrade means many changes for the 911th. The mission of the 911th will change as it converts to the C-17s and adds 192 permanent military and civilian workers, 137 of which will be full-time. With a project cost estimate of \$110 million, the transition to C-17s also represents an important addition of resources and economic activity coming into Allegheny County. ✪

BACKGROUND & HISTORY

The 911th Airlift Wing deploys as part of the Air Mobility Command. The 911th Airlift Wing contains the 911th Maintenance Group, 911th Mission Support Group, and 911th Airlift Wing Operations Group, among other support. The 911th recruits and trains Air Force Reserve personnel to provide airlift services, along with intra-theatre aeromedical evacuation. The 911th participates in joint service training exercises and supports active duty forces with airborne training initiatives.

The 911th began in 1943 on a former farm field near today's site of the Pittsburgh International Airport and served as a refueling stop for aircraft traveling across the country. Later, it emerged as a post-war reserve training center. Over the years, its mission has expanded, becoming a Military Airlift Group in 1967, with C-124 aircraft, and a Tactical Airlift Group in 1972, with C-123K aircraft. During the 1980s, the unit converted to C-130 aircraft. In 1992, the unit was renamed the 911th Airlift Group and, in 1994, became the 911th Airlift Wing.

The 911th has been nominated for closure under previous rounds of Base Realignment and Closure (BRAC), in 1995 and 2005. In 2012, it faced another attempt at closure during Congressional budget cuts.¹

In 1995, the Department of Defense (DoD) recommended inactivating the 911th and transferring the C-130 aircraft to Air Force Reserve units at Dobbins Air Force Base (AFB), Georgia, and Peterson AFB, Colorado.² Later that year, the BRAC Commission recommended keeping the 911th and reserve base open, reporting that “the base could accommodate all types of aircraft,” as well as provide low operating costs and expansion opportunities.³

In 2005, the DoD recommended closure of the 911th and relocation of the eight C-130s to Fort Bragg, North Carolina.⁴ Again, the BRAC Commission rejected the recommendation to close the base and recommended keeping the base open, with the installation forming the basis of a new Regional Joint Readiness Center. Co-located with the Greater Pittsburgh International Airport, the Regional Joint Readiness Center would provide military-civilian operations, homeland security, and community-based medical support to the DoD and the Department of Homeland Security National Incident Management Plan and the National Response Plan.⁵

During the 2005–06 period, the Military Affairs Council of Western Pennsylvania (MACWPA) sponsored the Joint Readiness Center Task Force, a public-private partnership that included a number of Western Pennsylvania organizations, universities, and government agencies. The task force began to develop the concept and identify the activities and functions of the Joint Readiness Center for the DoD and Department of Homeland Security. Despite strength in organizing and community support for the task force, the Joint Readiness Center was not funded. The Pittsburgh International Airport continues to maintain land for the center.

Though the 2005 BRAC was the most comprehensive round to date, the 911th survived and expanded in the following years. Despite the threat of closure, the strengths and capacity of the 911th and its military and civilian forces have prevailed over these efforts. ✪

ECONOMIC IMPACT

The 911th produces an important economic impact in Southwestern Pennsylvania and the state's overall economy. The IMPLAN model was used to estimate the total economic impact of the 911th Airlift Wing within Pennsylvania. The model estimates the direct, indirect, and induced impacts that accrue within Pennsylvania because of activity generated by the 911th. Direct impacts are the employment and spending associated with the 911th itself, while indirect impacts, sometimes called intermediate impacts, are generated by the supply chain requirements and industry linkages of the activity being analyzed. Induced economic impacts derive from the spending patterns of employees and service members. Adjustments were made to ac-

The 911th Airlift Wing has successfully moved to build the platform of the future with the emergence of the next generation C-17 air transport jets

count for employment and commuting patterns of both full-time staff in Coraopolis and assigned drilling reservists.

This economic impact analysis quantifies the cumulative impact on employment and economic output of the 911th. These results can be interpreted as the resulting economic impact if the 911th were to be either closed or relocated outside of Pennsylvania. Staff of the 911th provided economic data for the 2015–16 federal fiscal year; results reflect economic impact over that period. Personnel and employment data reflects September 30, 2016.

The 911th is an Air Force Reserve unit served by a mix of civilians, active duty service members, and traditional reservists who serve part-time throughout the

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U.S. Air Force C-130 Hercules from the 911th Airlift Wing flies over Pittsburgh

Photo courtesy of 911th Airlift Wing



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year and full-time during periods of mobilization or other extended orders to active duty. In 2016, the 911th had 375 civilian employees, including air reserve technicians, 54 active duty service members, and 1,197 currently serving reservists.⁶ Reservists include both traditional reservists, who serve on a part-time basis throughout the year or longer periods of mobilization, and air reserve technicians, who serve in a dual status as both reservists and full-time civilian employees. Approximately 80% of all personnel reside within Pennsylvania.

The economic impacts for Allegheny County and Pennsylvania are summarized in Table 1.

- Overall, the 911th Airlift Wing generated 1,024 full-time equivalent jobs and \$217 million in economic output in Pennsylvania.

- These jobs account for over \$76 million in labor income in Pennsylvania.
- An estimated \$155 million in Gross Regional Product (GRP), or value added production, is generated by the 911th in Pennsylvania.

The direct economic impacts of the 911th occur where operations are co-located at the Pittsburgh International Airport in Allegheny County, part of the Pittsburgh Metropolitan Statistical Area. Indirect economic impacts are also concentrated within Allegheny County due to the joint use of airport facilities. Along with induced impacts resulting from the spending patterns of workers, the economic impacts of 911th operations are concentrated within the Pittsburgh region, mostly within Allegheny County. These regional impacts include:

TABLE 1
ECONOMIC IMPACT SUMMARY – 911TH AIRLIFT WING

	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
ALLEGHENY COUNTY	Direct Effect	525*	\$ 47,094,040	\$ 108,306,713	\$ 135,867,736
	Indirect Effect	172	\$ 11,868,663	\$ 17,711,610	\$ 31,323,941
	Induced Effect	299	\$ 15,562,409	\$ 26,150,800	\$ 43,063,113
	Total Effect	996	\$ 74,525,111	\$ 152,169,124	\$ 210,254,791
PENNSYLVANIA TOTAL	Direct Effect	525*	\$ 47,094,040	\$ 108,306,713	\$ 135,867,736
	Indirect Effect	186	\$ 12,907,863	\$ 19,667,774	\$ 35,524,056
	Induced Effect	313	\$ 16,376,030	\$ 27,537,287	\$ 45,729,668
	Total Effect	1,024	\$ 76,377,932	\$ 155,511,775	\$ 217,121,462

*Represents full-time equivalent employment including civilian employees and active duty service members, and an adjustment for the part-time service of traditional reservists/Guard members.

Source: University of Pittsburgh Center for Social and Urban Research, 2018

TABLE 2

TOP 10 INDUSTRIES AFFECTED – 911TH AIRLIFT WING

SECTOR	DESCRIPTION	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
536	Federal government, military	245	\$ 23,211,157	\$ 68,440,968	\$ 68,440,972
408	Air transportation	141	\$ 12,454,146	\$ 22,418,599	\$ 49,967,817
535	Federal government, non-military	140	\$ 11,941,441	\$ 17,801,131	\$ 17,801,132
62	Maintenance and repair construction of nonresidential structures	38	\$ 2,305,773	\$ 2,867,965	\$ 6,175,516
503	All other food and drinking places	25	\$ 717,664	\$ 603,489	\$ 1,023,284
414	Scenic and sightseeing transportation and support activities for transportation	24	\$ 1,548,691	\$ 1,879,083	\$ 3,856,219
482	Hospitals	21	\$ 1,699,885	\$ 1,881,197	\$ 3,280,273
501	Full-service restaurants	20	\$ 426,291	\$ 478,994	\$ 925,447
440	Real estate	17	\$ 462,686	\$ 3,218,951	\$ 4,107,082
395	Wholesale trade	16	\$ 1,450,739	\$ 2,632,270	\$ 4,083,924

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

- **525 direct (full-time equivalent) jobs within Allegheny County. Along with indirect and induced effects, the 911th supports a total of nearly 1,000 jobs in Allegheny County. These jobs generate a total of \$74.5 million in labor income annually within the county.**

- **\$210 million in total economic output and \$152 million in value added production (Gross Regional Product) in Allegheny County.**

The direct, indirect, and induced economic impacts affect sectors of the state economy differently. Table 2 covers the top 10 industries impacted by spending at the 911th, as estimated by the IMPLAN

model. The largest impacts were on federal government (military and non-military) sectors, as well as air transportation. Most of the remaining industries affected by the 911th are locally serving industries, such as hospitals, restaurants, and real estate.

Additional impact due to the mobilization of traditional guard members is not directly included in this analysis. For many decades, national guard members and reservists were deployed on an irregular basis. Today, they are a core part of America's overseas military presence. When traditional guard members and reservists are mobilized under Title 10 orders, the economic impact of spending by Pennsylvania-resident dependents are in addition to the impacts quantified here. 🌟

COMPETITIVE ASSESSMENT

The sections that follow originate from an analysis of strengths, weaknesses, opportunities, and threats (SWOT) at the 911th. 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 3 and aspects of the analysis are described throughout the following sections.

The conversion of the 911th to C-17s represents one of the major competitive strengths of the installation, as it transitions from tactical to strategic airlift. The new planes also mean physical expansion of the

installation and enlargement of the workforce to meet the needs of these considerably larger aircraft. With a wingspan 37 feet wider and 77 feet longer than the C-130 cargo plane, the C-17s are 25% larger than the C-130s. The new planes will require \$54 million to construct a new fuel hangar, \$22.8 million for a fuel hydrant system, and \$8.2 million to widen the taxiway.⁷ Funds have been secured to lease an additional 25 acres from the Pittsburgh International Airport to accommodate expansion. The work began in 2017, and completion is expected for the new planes' arrival in 2019.

The addition of C-17s at the 911th also positions the wing strongly against future closure attempts. No other C-17s will be located nearby, so this situates the 911th strategically. While C-130s were also at

TABLE 3

SWOT THEMES – 911TH AIRLIFT WING

STRENGTHS

- **C-17s and Positioning**
- **Location and Proximity to Pittsburgh Airport**

OPPORTUNITIES

- **Expansion**
- **Connector Road**
- **Local Defense Group**
- **Cyber Security**
- **Airport and Community Partnerships**
- **Joint Readiness Center and Other Multi-Installation Initiatives**

WEAKNESSES

- **Single Entry/Exit (Force Protection)**
- **Visibility**
- **Size**

THREATS

- **Airline Recruitment of Pilots**



Staff Sgt. Jacob Pekelnicky and Tech. Sgt. Joseph Preston, 911th Maintenance Squadron avionics specialists, stand atop the fuselage of one of the unit's equipped C-130 aircraft, while they replace a battery in the emergency locator transmitter June 19, 2013, at the Pittsburgh International Airport Air Reserve Station.

Photo by Senior Airman Joshua J. Seybert

Youngstown-Warren Air Reserve Station, the C-17s are located at Wright Patterson Air Force Base, Joint Base McGuire-Dix-Lakehurst, and the Westover Air Reserve Base, making a stronger competitive location for the 911th and the Pittsburgh area.

In addition, C-17s will require a differently skilled workforce, as the 911th will transition from tactical to strategic airlift needs. The new planes will require more aircraft maintenance workers and new technical staff, with new hires in loadmasters and pilots, and a reduction in other staff, such as flight engineers and navigators. The increase in the aircraft maintenance group will add over 100 full-time workers, plus pilots, loadmasters, and reservists. Though new workers will be recruited from outside the region for the startup of the C-17s, much of the 911th workforce will need to be built through local connections and training for new employees.

The 911th derives significant benefits from its location at the Pittsburgh International Airport. The air-

port has been critical in a number of arrangements with the 911th; the two cooperate on a number of shared agreements that improve delivery and are cost-effective. These collaborations also bring flexibility when needed. The 911th and airport have shared service agreements with fire services and other cost-effective partnerships in shared activities. It is worth noting here a threat related to the airport. Commercial airlines are facing a shortage of pilots nationwide and hiring at a rapid pace (and at a high pay rate), making it harder for the Air Force to retain full-time pilots. The advantage, however, of reservists and Guard pilots is that they can fly commercial, unlike active duty personnel. This delivers a cost-effectiveness for the 911th, as reservist pilots are less expensive.

Despite the fact that the 911th and the 171st Air Refueling Wing are neighboring installations, no road connects the two and each has only one way on and off its respective base, which is a force protection concern. Fortunately, a planned connector road will ad-

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dress some of these issues, improving access and opening new avenues for shared resources. The road is currently being designed and funds are being sought to make this improvement. With a direct link, the benefits would also accrue to the 171st, with better prospect of securing the KC-46A tankers it seeks to add in the next competitive round. The role of the Local Defense Group (LDG) in this improvement is discussed in the next section.

The location also has important land implications that can deflect encroachment issues. With 115 acres, the 911th is one of the smallest Air Force Reserve Stations, but the advantages of its airport location has played a critical role. In the 2005 BRAC, for instance, Pittsburgh International Airport offered the 911th 53 acres free of charge, and the airport location enabled the 911th to acquire another 25 acres to support the expansion of the installation with the C-17s.

Perhaps the biggest drawback to the small size of the base is having only one gate for entrance and exit. MACWPA, the region's LDG, has agreed with the installation's commander that this poses a serious force protection issue for base personnel and is working with the Allegheny County Airport Authority on a project to construct a second access gate. A second gate with inspection capability not only reduces the force protection risk, but also provides an entrance for commercial traffic to keep disruptions to normal traffic flow at the main gate to a minimum.

The relations with the airport also have important economic impacts. Co-location with the airport produces impacts within the air transportation sector and additional impacts in the regional medical and education services industries concentrated in the Pittsburgh region. While the weaknesses and threats to the 911th are far different from earlier years, the installation needs to continue to look forward and advance. ✪



A loadmaster assigned to the 758th Operations Group watches as a heavy equipment load parachutes to the ground below during a tactical air drop training mission, October 19, 2014 over Cadiz, Ohio. Training missions of this sort are performed routinely to ensure combat readiness.

Photo by Senior Airman Joshua J. Seybert

THE 911TH & THE WESTERN PENNSYLVANIA COMMUNITY

MACWPA is the LDG of the 911th Airlift Wing, along with the two other installations in Coraopolis — the 316th Sustainment Command and 171st Air Refueling Wing. MACWPA is a model LDG in many ways. Since 1995, the MACWPA has played critical roles in the sustainment and advancement of these installations, and, importantly, in promoting the success and capabilities of the 911th in recent rounds of BRAC.

MACWPA creates continued opportunities in part because of its links and exposures to outside partnerships. The success of bringing the C-17s to the 911th demonstrates the importance of community involvement to the stability of the installation and the strength of MACWPA as a support organization and LDG. MACWPA, successful in past BRACs, moved proactively for the 911th to attract the larger aircraft and commitment from the Air Force and the Obama Administration.⁸

Maintaining a public face is a challenge for all of the Pittsburgh area installations, and MACWPA leads the way in promoting their presence to community and business stakeholders. It has embarked on redirecting some of the 911th's lack of public presence through recent initiatives, including the May 2017 Wings Over Pittsburgh Open House/Airshow. The event was discontinued six years ago, and MACWPA was critical in bringing it back to Western Pennsylvania. Wings Over Pittsburgh is a free air show that features U.S. Air

Force Thunderbirds and other airborne acts and ground displays.⁹ Wings Over Pittsburgh highlights the importance of the 911th to the broader regional population and demonstrates another important role for MACWPA.

Related to community partnerships is also the Air Force Community Partnership program, a recent initiative of the Air Force to forge formal ties between installations and community partners to find shared values and mutual benefits.¹⁰

The partnership is an important source of information sharing and clearing the path for community-installation shared services and cost reductions.

One major goal for the Air Force Community Partnership is the connector road. The 911th and the Community Partnership, along with MACWPA, have worked to address one weakness of the 911th and improve an airport asphalt perimeter road, with the goal to make this a connector road between the 911th Airlift Wing and the nearby 171st Air Refueling Wing. The road is on airport property and thus under the jurisdiction of the Federal Aviation Administration (FAA). Work on the project could not begin until the project received FAA approval, finalized in the spring of 2017. Project funds of an estimated \$18 million are needed for the full engineering design and are being sought in some sort of joint capacity. The access road project is also critical for the potential Joint Readiness Center, as it relies on connections — physical and otherwise — between the 911th and 171st. ✪

MILITARY AFFAIRS COUNCIL
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LOOKING FORWARD

The 911th Airlift Wing has successfully moved to build the platform of the future rather than maintaining that of the past with the emergence of the next generation C-17 air transport jets. This conversion will change the wing's mission and expand the physical size of the installation, the size of the workforce, and the types of workers on board. Many of the strengths of the 911th are related to this conversion and other opportunities that it can create.

- *The 911th has significantly expanded its capabilities through its mission change from a C-130 Hercules to C-17 Globemaster III strategic airlift. The effects on the Pittsburgh region and Pennsylvania economy will be realized through construction and greater numbers of technicians needed for the C-17s.*
 - *With support from MACWPA and the Air Force Community Partnership Program, the 911th is working with the 171st to build a connector road between the two installations, and a greater direct link to the Pittsburgh International Airport. Both the 911th and the 171st Air Refueling Wing will benefit from expanded joint capability and increased security. The project also tightens relations with the Pittsburgh International Airport and possible land expansions.*
 - *Pittsburgh International Airport is central to all strengths of the 911th. Though the Regional Joint Readiness Center — proposed by the 2005 BRAC Commission and critical in keeping the 911th in operation — remains unfunded, the airport continues to reserve land for the center. The opportunities remain for an expansion of interagency operations in support of such a mission.*
- *MACWPA can continue its important role in engaging other stakeholders, elected officials, and regional organizations to speak in one voice for the 911th, 171st, and 316th, as well as reaching out to Pennsylvania's Congressional delegation and others about the value and strength of these installations. Through the PMCEC, MACWPA can also work with other Pennsylvania LDGs on shared communications and coordinated common causes. Again, the key role of the MACWPA in forging partnerships and community support is a model for conveying strengths and developing opportunities. The MACWPA can point the way for other LDGs to demonstrate the impacts that their organizing and support have on the region and state.*
 - *MACWPA can continue working to integrate common issues across Western Pennsylvania installations and leveraging partnerships that can advance installations' missions. Possible opportunities include a state Logistics Center of Excellence — which would build a common orientation around the state's concentrated strength in transportation, distribution, and logistics — and a joint military cargo hub at the 911th and 171st. Both involve the Pittsburgh International Airport, as well as the network of regional training and educational institutions that can prepare workers for future jobs, including those arising from the C-17s. Particularly relevant to the hub concept is that the airport recently entered into an agreement with Qatar airlines for scheduled air cargo service to Doha,¹¹ which could position the airport as a backup for primary military air hubs on the East Coast, including Dover and McGuire Air Force Bases. The joint cargo hub could alleviate congestion at East Coast hubs and potentially reduce costs with deployment overseas from Pittsburgh. The MACWPA and PMCEC could sponsor a study of the potential importance and cost savings of the joint cargo hub operations.*



A C-17 Globemaster III Aircraft Takes off from Aviano Air Base in Italy, October 10, 2017. The conversion of the 911th from C-130s to C-17s represents one of the major competitive strengths of the installation, as it transitions from tactical to strategic airlift.


U.S. Army Photo by Visual Information Specialist Paolo Bovo

▪ *Cyber security represents an external area of opportunity for military units in the Pittsburgh region to partner with the FBI's National Cyber-Forensics and Training Alliance, based in Pittsburgh, Carnegie Mellon University, and the University of Pittsburgh. The 911th Communications Squadron has engaged in a number of partnerships and collaborations around*

cyber assurance, including joint training with the Computer Emergency Response Team division of Carnegie Mellon University's Software Engineering Institute.¹² The University of Pittsburgh's Institute for Cyber Law, Policy and Security, formed in 2017, is another potential collaborator. ⚙

Notes

- ¹ Brian Bowling, "911th Airlift Wing in Moon Hopeful to Land Air Force C-17 Squadron," *Trib Live*. January 13, 2016.
- ² Defense Base Closure and Realignment Commission, *1995 Report to the President*, 1995
- ³ Defense Base Closure, 1995
- ⁴ Defense Base Closure and Realignment Commission, *2005 Defense Base Closure and Realignment Commission Report*, vol. 2, 2005, Q-48
- ⁵ The Dupuy Institute, "Regional Joint Readiness Center: A Value-Added Regional Resource," May 2005. See also "About the JRC," Joint Readiness Center Task Force, accessed January 17, 2018, sciencengines.com/jrc/About.htm
- ⁶ Traditional reservists serve a minimum of 24 days spread throughout the year in monthly drills, and an additional period of annual training ranging from 12 to 29 days. Civilians include Air Reserve Technicians who typically serve as federal civilian employees, but have dual status as reservists
- ⁷ Ed Blazina, "Obama Budget Includes Funds to Bring C-17 Planes to 911th Airlift," *Pittsburgh Post-Gazette*, February 10, 2016
- ⁸ Blazina, "Obama Budget"
- ⁹ Ed Blazina, "Large Weekend Crowds Expected for Air Show near Airport," *Pittsburgh Post-Gazette*. May 12, 2017
- ¹⁰ "Air Force Community Partnership Program," accessed January 12, 2018, community.afan.org/wg/airforcepartnerships
- ¹¹ Theresa Clift, "Pittsburgh Airport Paying Qatar Airways up to \$1.48M for Cargo Services," *Trib Live*, November 17, 2017
- ¹² "Cyber Lightning Exercise Helps Air National Guard and Air Force Reserve Units Learn and Test New Skills," Carnegie Mellon University, Software Engineering Institute, June 17, 2016



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 to see other installation-specific reports and a statewide report.



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