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June 2018
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

Located in Lebanon and Dauphin Counties, Fort Indiantown Gap (FTIG) serves as the busiest National Guard training site in the U.S., training more than 130,000 troops each year. FTIG is the only live fire maneuver training facility in Pennsylvania. It is managed by the Pennsylvania National Guard and serves Pennsylvania National Guard units, as well as military and civilian personnel from around the country.

FTIG is home to a diverse mix of tenants and activities, ranging from its core activities of military training to unique functions such as the Pennsylvania National Guard Military Museum. FTIG can support a host of training activities ranging from individual warrior training to brigade level unit support. The FTIG range complex includes several weapons ranges, urban combat training sites, virtual training, and helicopter training. FTIG’s Muir Army Airfield is the second busiest Army heliport in the U.S.

In total, the FTIG site encompasses approximately 17,100 acres. Of this, 12,000 acres are used as training areas, and facilities cover the remaining 5,000 acres. FTIG contains a small number of housing units, but the majority of personnel live off-post. Most of the installation’s users are National Guard members, while others use the base for limited training periods. Current facilities can accommodate from 8,000 to 15,000 personnel per training event.

FTIG is Lebanon County’s largest employer. Over 2,200 people work at FTIG on a regular basis, but the base often hosts as many as 9,000 personnel on a given weekend. FTIG has a big impact on the regional economy beyond its role as a major local employer and in providing contracting opportunities to local businesses. Personnel using FTIG for training purposes stimulate the economy further by using local hotels and patronizing local restaurants and other retail establishments.
BACKGROUND & HISTORY

The FTIG site has supported military missions since 1931. Since that time, the base has served a variety of functions. It provided Army training in World War II and during the Korean War. FTIG has supported other unique missions, including stints as a German POW camp after World War II and as a housing facility for Cambodian, Cuban, and Vietnamese refugees in the 1970s and 1980s.

Officially, an active U.S. Army presence at FTIG ended in October 1998 through the Base Realignment and Closure (BRAC) process. At that point, formal control of FTIG was given back to the Commonwealth of Pennsylvania to support the Pennsylvania National Guard. Today, FTIG is a state-managed federally-leased installation. Thus, its status and continued operations cannot be reviewed via the BRAC process or other federal driven strategies related to real estate or installation management. However, changes in National Guard and Reserve training priorities could affect future FTIG activities.

Since the departure of active-duty troops in 1998, base operations have grown in both size and scale as state leaders have developed and supported newer uses for the base. FTIG has developed new missions, built new capacities and infrastructure, and greatly increased the tempo of on-site training activities. FTIG has developed a strong reputation for providing excellent customer service and a world-class warrior training experience.

Fort Indiantown Gap hosts Pathfinder Course, 2018.
Photo by Pennsylvania National Guard
**FTIG** is home to a sizable level of activities, and these impacts ripple into the wider regional economy. The IMPLAN model was used to estimate the total economic impact of operations at the FTIG location. The IMPLAN model estimates the direct, indirect, and induced impacts that accrue within Pennsylvania because of activity generated by the National Guard at the FTIG location. Direct impacts are the employment and spending associated with the installation itself, while indirect impact, 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. Economic impacts were estimated for a local region consisting of Lebanon and Dauphin counties and for the total economic impacts within Pennsylvania.

Table 1 is a summary of economic impacts for Fort Indiantown Gap broken down by direct, indirect, and induced sources.

- Overall, operations at FTIG generate 4,641 jobs and over $357 million in labor income annually within Pennsylvania; 4,437 of these jobs and $344 million in labor income annually are estimated to accrue within a local area consisting of Lebanon and Dauphin counties.

### Table 1: Economic Impact Summary – Fort Indiantown Gap

<table>
<thead>
<tr>
<th>IMPACT TYPE</th>
<th>EMPLOYMENT</th>
<th>LABOR INCOME</th>
<th>VALUE ADDED</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEBANON &amp; DAUPHIN COUNTIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Effect</td>
<td>2,943</td>
<td>$274,408,691</td>
<td>$427,033,917</td>
<td>$493,476,260</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>197</td>
<td>$11,690,844</td>
<td>$17,212,656</td>
<td>$29,472,413</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>1,297</td>
<td>$58,182,813</td>
<td>$99,198,905</td>
<td>$170,539,586</td>
</tr>
<tr>
<td>Total Effect</td>
<td>4,437</td>
<td>$344,282,349</td>
<td>$543,445,478</td>
<td>$693,488,259</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>IMPACT TYPE</th>
<th>EMPLOYMENT</th>
<th>LABOR INCOME</th>
<th>VALUE ADDED</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PENNSYLVANIA TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Effect</td>
<td>2,943</td>
<td>$274,408,691</td>
<td>$427,033,917</td>
<td>$493,476,260</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>246</td>
<td>$15,340,643</td>
<td>$23,371,505</td>
<td>$41,692,491</td>
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<tr>
<td>Induced Effect</td>
<td>1,453</td>
<td>$67,379,014</td>
<td>$114,215,705</td>
<td>$198,007,166</td>
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<tr>
<td>Total Effect</td>
<td>4,641</td>
<td>$357,128,349</td>
<td>$564,621,127</td>
<td>$733,175,917</td>
</tr>
</tbody>
</table>

Source: University of Pittsburgh Center for Social and Urban Research, 2018
Operations at FTIG affect a range of industries. Table 2 highlights the industries with the largest employment impacts generated by operations at FTIG. This list reflects employment impacts beyond the jobs located at FTIG itself. The largest impact is on jobs at hospitals, but extends across a range of retail and service sector industries including restaurants, real estate, and transportation industries. 

Table 2

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
<th>Employment</th>
<th>Labor Income</th>
<th>Value Added</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>482</td>
<td>Hospitals</td>
<td>115</td>
<td>$9,165,915</td>
<td>$10,143,564</td>
<td>$17,687,493</td>
</tr>
<tr>
<td>501</td>
<td>Full-service restaurants</td>
<td>99</td>
<td>$2,143,023</td>
<td>$2,407,969</td>
<td>$4,652,347</td>
</tr>
<tr>
<td>503</td>
<td>All other food and drinking places</td>
<td>88</td>
<td>$2,501,055</td>
<td>$2,103,154</td>
<td>$3,566,136</td>
</tr>
<tr>
<td>502</td>
<td>Limited-service restaurants</td>
<td>81</td>
<td>$1,552,124</td>
<td>$3,828,792</td>
<td>$6,651,850</td>
</tr>
<tr>
<td>440</td>
<td>Real estate</td>
<td>78</td>
<td>$2,161,242</td>
<td>$15,035,964</td>
<td>$19,184,493</td>
</tr>
<tr>
<td>400</td>
<td>Retail - Food and beverage stores</td>
<td>69</td>
<td>$1,996,997</td>
<td>$2,658,462</td>
<td>$4,164,672</td>
</tr>
<tr>
<td>395</td>
<td>Wholesale trade</td>
<td>62</td>
<td>$5,641,614</td>
<td>$10,236,333</td>
<td>$15,881,502</td>
</tr>
</tbody>
</table>

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

The sections that follow originate from an analysis of strengths, weaknesses, opportunities, and threats (SWOT) at FTIG. 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.

FTIG enjoys an enviable position in Pennsylvania and within the National Guard Bureau as well. It serves as the headquarters for the Pennsylvania Department of Military and Veteran Affairs, the Pennsylvania National Guard, and hosts other key state entities such as the Pennsylvania Department of Transportation’s Eastern Training Facility, and various Army Reserve and Army National Guard units. At regional and national levels, FTIG is a core component of the National Guard’s training infrastructure. For the last two years, FTIG has ranked first among the 48 National Guard training centers located throughout the continental U.S. and Puerto Rico for number of training man-days. In FY2016, the installation logged more than 740,000 man-days through the training of more than 120,000 service members and federal, state, local, and international personnel.

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>SWOT THEMES – FORT INDIANTOWN GAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STRENGTHS</strong></td>
<td><strong>WEAKNESSES</strong></td>
</tr>
<tr>
<td>• Unique Mission Sets</td>
<td>• Force Protection</td>
</tr>
<tr>
<td>• Vital Assets, Including Workforce</td>
<td>• Limited Visibility</td>
</tr>
<tr>
<td>• Location</td>
<td>• Relatively Small Size</td>
</tr>
<tr>
<td><strong>OPPORTUNITIES</strong></td>
<td><strong>THREATS</strong></td>
</tr>
<tr>
<td>• Force Protection Planning</td>
<td>• Shortages of Some Specialized Workers</td>
</tr>
<tr>
<td>• Partnerships</td>
<td></td>
</tr>
<tr>
<td>• Desired Visibility</td>
<td></td>
</tr>
</tbody>
</table>
FTIG possesses numerous competitive strengths, suggesting that the installation will be able to maintain its current strong performance into the future. These competitive advantages include a convenient location, unique facilities and capacities, forward thinking management, and strong community partnerships.

Fort Indiantown Gap’s core strength stems from its excellent location in Central Pennsylvania. This site has easy access to major highways, and can be easily accessed by National Guard units in Pennsylvania and across the East Coast. It also has quick access to major metropolitan areas, including Washington D.C., Baltimore, New York, Philadelphia, and Pittsburgh. This location provides FTIG with a competitive advantage when compared to other Guard training centers with less convenient locations. Travel costs are an important factor in determining training locations, especially when many units must bring their own equipment to training centers. FTIG’s physical layout and infrastructure also provide strong competitive assets.

FTIG is conveniently located, yet the region remains very rural. However, as Lebanon County has grown, encroachment is becoming a potential concern for the facility. FTIG provides one of the few easily accessible training sites for night time helicopter flights and live fire ranges. At present, FTIG is designated as a Level II Maneuver Training Center, and it can host units as large as a brigade, composed of approximately 4,000 service members.

FTIG also benefits from its diverse set of training offerings. FTIG currently provides the following training opportunities:

- A Training and Maneuver Corridor for live fire, maneuver, vehicle and other kinds of customized training.
- Leadership Reaction Course
- Muir Army Airfield for rotary aircraft training
- Bollen Air-to-Ground Weapons Range
- Urban Warfare Training
- Obstacle Course
- Weapons Ranges
- Unmanned Aircraft Systems Facility
- Virtual Training Centers

FTIG also hosts several Training Facilities that offer specialized courses and instruction these include:

- 166th Regiment Regional Training Institute
- Eastern Army Aviation Training Site
- Medical Battalion Training Site and Medical Simulation Training Center
- Northeast Counterdrug Training Center, High Risk Entry Facility and Polygraph Center
- Pennsylvania Air National Guard’s Lightning Force Academy
- Regional Equipment Operators Training School (REOTS) Complex

Because of its exceptional location and facilities, FTIG contains many strong, marketable assets that make it a premiere military training facility. However, it is important to remember that assets “don’t sell themselves” and to emphasize the extraordinary customer service commitment executed by FTIG personnel and staff. Many training centers have strong capabilities, but success comes when strong capabilities are combined with effective management and a commitment to customer service. FTIG management has succeeded in this task and built a strong reputation for excellent customer service.

FTIG’s leaders, both military and civilian, place great importance on providing excellent customer service and on developing new capabilities and capacities. In recent years, virtual training has assumed greater importance, supported by significant investment to improve local broadband capacity. In 2016, FTIG trained 32,000 people in its virtual training center. The team has also supported major new investments in its ranges to accommodate new weapons systems and ammuni-
tion types. For example, recent investments have created new capacities in small arms and small unit training. Finally, FTIG continues to develop other new capabilities. For example, the center was recently certified to provide air assault, rappel master, and pathfinder training, making FTIG one of only seven locations that host these trainings in the U.S. In 2017, FTIG expected to train 400 soldiers in these capabilities.

Given its convenient location, excellent facilities, and strong management capacity, FTIG is well situated to maintain and grow its current base of operations. However, future growth will be constrained by the lack of additional space. While FTIG is a sizable installation, it remains on the small side compared to many Guard or other military training centers. In the face of these space constraints, FTIG management has attempted to develop capabilities that require less open space (e.g. virtual training) and to focus on supporting existing core capacities. As former Installation Commander Colonel Robert Hepner, Jr. noted: “We have our limitations, but I think what we are capable of doing, we do it the best.” However, at the same time, base leadership has aggressively acted to address potential encroachment issues that might affect training operations.

FTIG faces some other challenges related to its physical plant. The current lack of a security perimeter is a pressing problem as there is no means to currently control access. Fortunately, solutions are on the way as the FY2017 National Defense Authorization Act contained funding to construct a new security perimeter at FTIG. This $20 million project is underway, and the perimeter should be completed in 2018 or 2019. The security perimeter funding was secured with support from the local Congressional delegation, especially Representatives Bill Shuster and Charlie Dent, Chairman of the House Appropriations Subcommittee on Military Construction.

Like all training centers, FTIG always faces an uncertain budget situation. Nearly all funds for Guard training come from federal dollars as opposed to state investments. As such, FTIG’s continued success will depend on sustained Department of Defense investment in training for the Guard and Reserve. Funds for training and base operations are expected to hold steady in coming years, but additional funding would need to be secured if major investments in new facilities, capacities, or site upgrades were deemed necessary.
FITG greatly benefits from close partnerships with key officials at the state and local level. At the state level, FTIG is headquarters for the Department of Military and Veterans Affairs and the Pennsylvania National Guard, and hosts many important state government functions and activities, including a home for the Lieutenant Governor. The site is state-owned, and the state has strongly supported efforts to upgrade and improve FTIG and its facilities.

FTIG’s leadership is also investing significant time and resources into building closer linkages with community partners in Lebanon County and surrounding areas. Most prominently, the Lebanon County Commissioners and FTIG leadership — with help from the Pennsylvania Military Community Enhancement Commission — created a local defense group (LDG) with the mission “to proactively promote and enhance the economic, community, and military value of Fort Indiantown Gap.” The LDG regularly meets and has developed a strategic plan for building closer ties between FTIG and the surrounding region. However, the LDG has not yet assumed an active role in advocating for FTIG.

The LDG has identified some options for future action. Its strategic plan, based on surveys and interviews with local leaders, presents several important action items for regional leaders. As a primary goal, the
Fort Indiantown Gap hosts inaugural air assault preparation course. Photo by Pennsylvania National Guard

LDG intends to further highlight FTIG’s local economic impacts, which are not fully understood by residents. Group leaders plan to work with FTIG leadership to “tell the story” of how the base contributes to local economic prosperity and to supporting national security as well.

This effort will also include new initiatives to increase local awareness of contracting opportunities at FTIG. At present, FTIG does not have formal processes for sharing contracting opportunities with local businesses. Thus, efforts to build local supplier relationships are needed. Opportunities would range from basic activities, like janitorial or other support services to information technology and other products/services related to FTIG’s core training missions.

Finally, the LDG intends to build on FTIG’s already excellent partnerships linked to environmental stewardship. Currently, the installation contains numerous sites of special environmental sensitivity. It is home to one of the largest native grassland areas in Pennsylvania, and one of the few native habitats of the Regal Fritillary butterfly. The butterfly habitat and other sites, like local fishing streams and ponds, are regularly accessed by FTIG personnel and area outdoor enthusiasts.

FTIG’s leadership has won numerous awards for environmental stewardship in its nature sites and in its daily military and training operations. These awards include First Place in the 2016 Army National Guard Environmental Awards for Sustainability, and 2015 Awards for Environmental Restoration and Natural Resource Conservation. FTIG has built award-winning local partnerships in environmental stewardship and is especially well-known for its recent project with the Ward Burton Wildlife Foundation and the Nature Conservancy to preserve the DeHart Reservoir and Property, a pristine site covering 8,200 acres adjacent to FTIG. This effort is especially noteworthy not only because it preserves natural habitat, but more importantly, it also protects training areas that are critical for nighttime helicopter training, one of FTIG’s core activities.

FTIG attracts workers from a wide regional footprint across Central Pennsylvania. The base would benefit from closer linkages to area workforce development agencies that can assist in training and provide employees with needed critical technical skills.
FTIG’s current leadership and management team have built an enviable reputation that has led to numerous awards and close partnerships with state and local partners. To build on this progress, the FTIG team and its partners should consider the following strategies:

- **Make a Stronger Economic Case:** While FTIG has close local partnerships in areas such as environmental stewardship, it could do a better job of promoting FTIG as a key economic asset for Central Pennsylvania. FTIG is Lebanon County’s largest employer, yet its economic impacts are not widely understood in the region. The base leadership should work to create closer connections to local employers seeking contracting opportunities at FTIG. It should also consider building closer ties to local education providers and workforce development agencies. Closer region-wide cooperation with the Cumberland-York Area Local Defense Group could be helpful on this front.

- **Build on FTIG’s Role as a Regional Training Center:** FTIG’s training programs attract thousands of outsiders to the region every year. Regional leaders could make a more concerted effort to market Lebanon County and Central Pennsylvania to these visitors. This work would help further stimulate the local hospitality and retail sectors and perhaps attract talented workers to the region as well.

- **Continue Investing in Next Generation Capacity:** Because FTIG’s site is physically constrained, base leaders must continue to develop and invest in new capabilities that help maintain FTIG’s status as an in-demand training center. These include continued investments in virtual training and consideration of new capacities, such as 3-D printing or other specialized niches (e.g., recently developed air assault training capabilities).
Notes

2 Matrix Design Group, “Fort Indiantown Gap Joint Land Use Study: Background Report,” January 2015, 3-3
3 This analysis was specific to the impact of the National Guard training and headquarters operations located at Fort Indiantown Gap. Not included is the impact of Pennsylvania National Guard installations or facilities located elsewhere in Pennsylvania
5 “Gap Again”
6 “Gap Again”
7 Robert Hepner, Jr., Personal Communication, May 8, 2017
9 Strategic Consulting Partners, 3
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.