



**Wright-Patterson AFB
Compatibility Use Plan**

Executive Summary

What is the Compatibility Use Plan?

The Wright-Patterson Air Force Base (WPAFB) Compatibility Use Plan (CUP) is a collaborative community-driven initiative to ensure the long-term compatibility of WPAFB's operations with development in the surrounding communities. This initiative, funded by the Department of Defense's Office of Local Defense Community Cooperation (OLDCC), brings together community and military stakeholders to promote compatible growth, prevent conflicts, and protect WPAFB's mission and the community quality of life.

The CUP is a tool for balancing community growth with military needs. It fosters partnerships and recommends implementation actions to address known and potential compatibility issues. The CUP is centered around three objectives to ensure the long-term compatibility of military operations and community growth:



UNDERSTANDING

Bring together community and military representatives to discuss compatibility issues in an open, transparent forum. Ensure that all stakeholders are informed and engaged.



COLLABORATION

Encourage coordinated planning between WPAFB, local jurisdictions, and community stakeholders to foster compatible land use and resource development. Collaborate to prevent incompatible community growth near military operations and to reduce potential conflicts.



ACTIONS

Outline a set of practical strategies, activities, and tools that can be implemented by WPAFB, local governments, agencies, and other stakeholders to enhance compatibility and ensure that both military and community needs are met effectively.

Who Participated in the CUP Development?

The following stakeholders participated in the CUP development:

- ▶ Wright-Patterson Regional Council of Governments (WPRCOG)
- ▶ Montgomery County
- ▶ Greene County
- ▶ Clark County
- ▶ City of Beavercreek
- ▶ City of Dayton
- ▶ City of Fairborn
- ▶ City of Huber Heights
- ▶ City of Riverside
- ▶ Bath Township
- ▶ Miami Conservancy District
- ▶ Miami Valley Regional Planning Commission
- ▶ Dayton Development Coalition
- ▶ Congressman Mike Turner's Office
- ▶ WPAFB
- ▶ Wright State University
- ▶ Natural Resources Defense Council
- ▶ Public

WPAFB Overview

WPAFB is a key U.S. military installation in southwestern Ohio, northeast of Dayton. As one of the largest Air Force bases in the country, WPAFB hosts a wide range of missions, including research, development, acquisition, and logistical support. The base is home to several key organizations: Air Force Materiel Command (AFMC), Air Force Research Laboratory (AFRL), and the National Air and Space Intelligence Center (NASIC). WPAFB is pivotal in advancing U.S. airpower capabilities and supporting global military readiness.

COMMUNITY OVERVIEW

The communities surrounding WPAFB exhibit diverse development patterns ranging from urban to rural. The base's proximity and regional economic growth shape diverse housing, commerce, and conservation needs. The communities surrounding WPAFB include:

Counties	Cities	Townships
Clark, Greene, Miami, and Montgomery	Fairborn, Beavercreek, Huber Heights, Riverside, and Dayton	Bath, Bethel (Miami County), Bethel (Clark County), Beavercreek, and Mad River

To the south and west, urban and suburban areas like Dayton and Riverside feature established neighborhoods, commercial corridors, and industrial zones. To the north and east, the cities of Fairborn, Beavercreek, and Bath Township display suburban growth, with residential subdivisions and community facilities. Outlying townships such as Bethel and Mad River maintain rural and agricultural characteristics, with lower-density development and open spaces.

ECONOMIC AND SOCIAL TIES

WPAFB is Ohio's largest single-site employer, supporting over 100,000 military and civilian jobs and contributing billions annually to the regional economy. Beyond its economic impact, WPAFB partners with local organizations on education, emergency services, and environmental sustainability. These collaborations enhance the military mission and improve community quality of life, highlighting the value of compatibility through partnerships.

Wright-Patterson AFB Annual Economic Impact



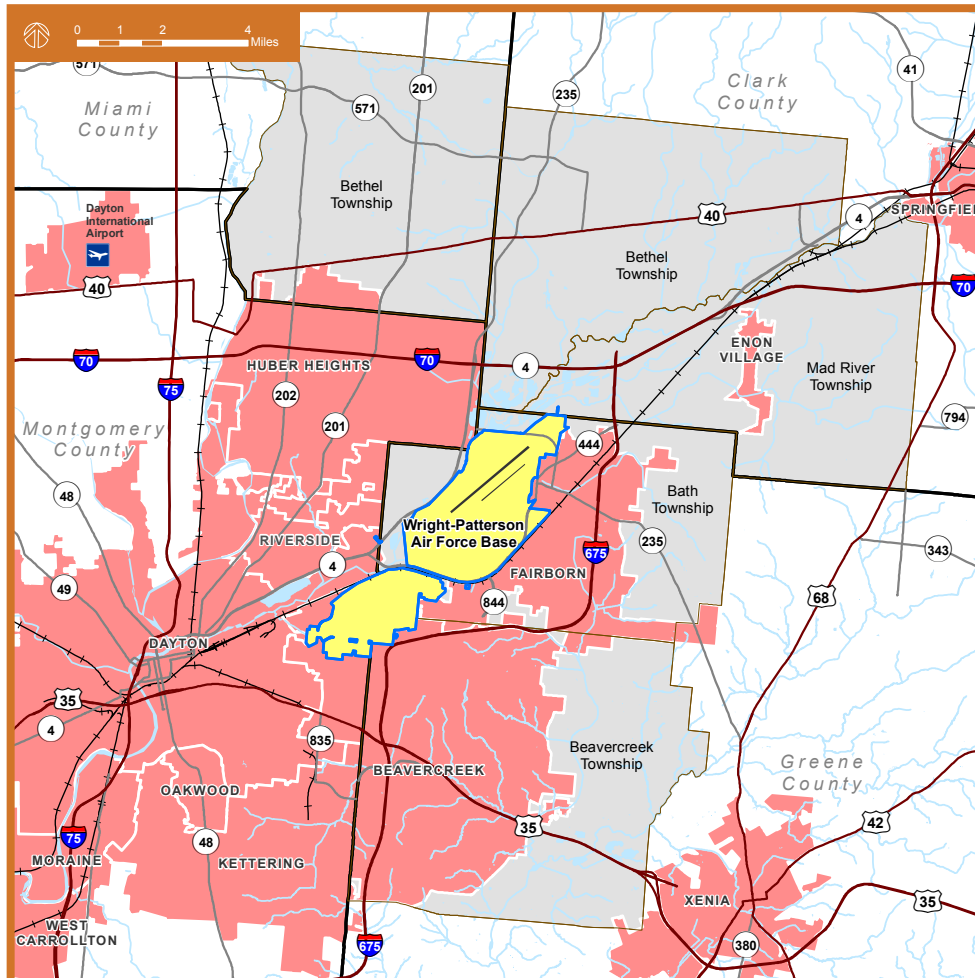
DIRECT EMPLOYEES
38,000+



INDIRECT JOBS
81,000+



ECONOMIC IMPACTS
\$16B+



Wright-Patterson Air Force Base Study Area

LEGEND

- Wright-Patterson AFB
- Runway
- Water Body
- City Boundary
- Township
- County Boundary
- Interstate/US Highway
- State Route
- Railroad

Overview of Compatibility at Wright-Patterson AFB

HISTORY OF COMPATIBILITY

Wright-Patterson Air Force Base (WPAFB) has a rich history of collaboration with surrounding communities to ensure land use compatibility, which is essential for sustaining its mission and supporting regional growth.

Establishment of the Joint Airport Zoning Board

Established to oversee the enforcement of zoning regulations introduced with the 1975 Air Installation Compatible Use Zones (AICUZ) Study. These regulations created 11 zoning districts to address safety and noise concerns, helping safeguard both military operations and community welfare.

1975

1997

Revised Airport Zoning Regulations

Updated the airport zoning regulations, consolidating the original 11 districts into six zones. These revisions incorporated evolving land use and noise compatibility standards, including restrictions on certain facilities, residential developments, and construction near flight paths.

Formation of the Wright-Patterson Regional Council of Governments (WPRCOG)

The WPRCOG was established to provide a formal mechanism for collaboration among the cities and townships surrounding WPAFB. This council plays a pivotal role in implementing compatibility strategies and addressing land use conflicts through coordinated regional efforts.

2020

TODAY

Wright-Patterson AFB Compatibility Use Plan

Completion of the Compatibility Use Plan – identifying compatibility issues and challenges and recommending actions to address them.

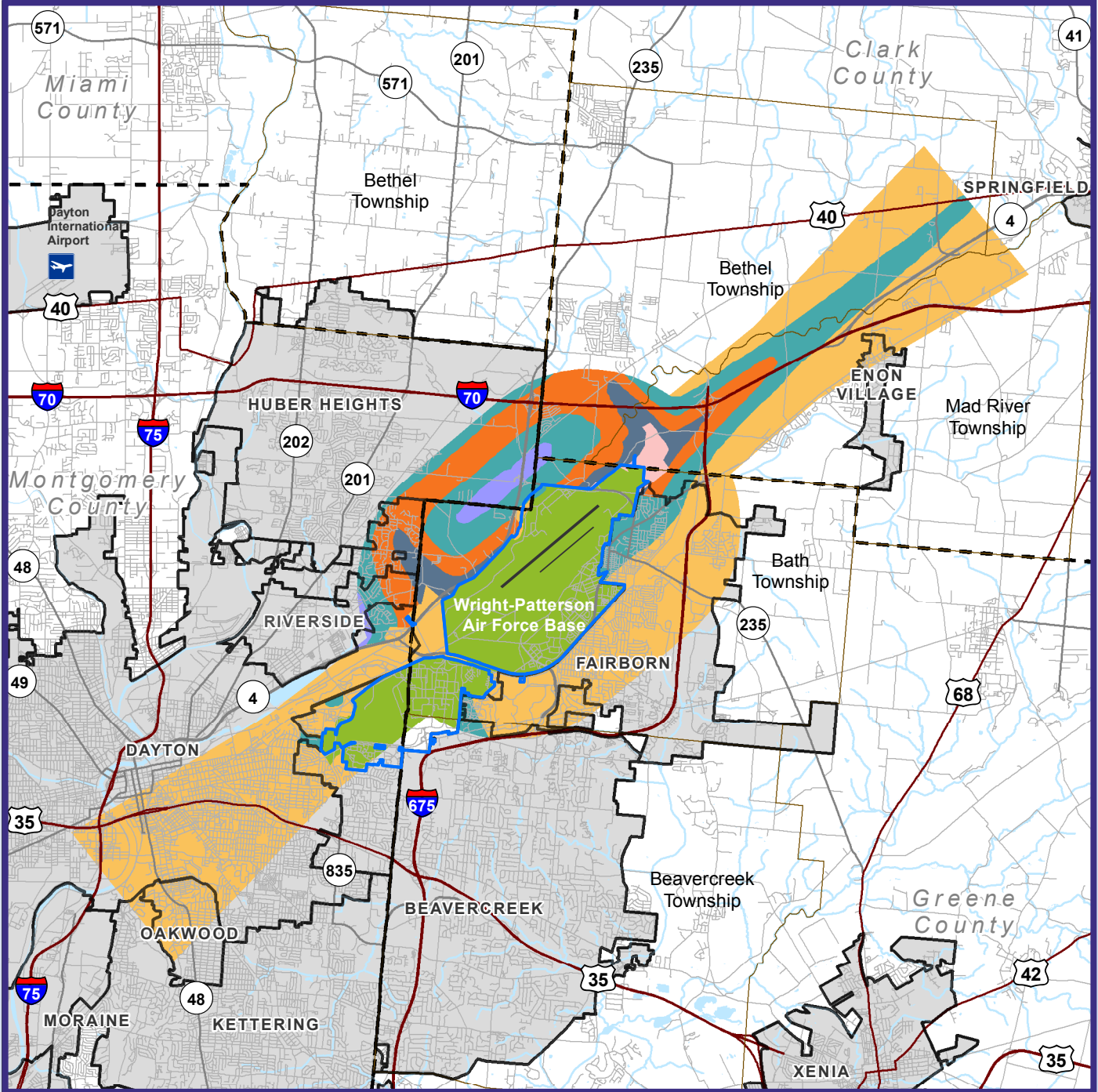
The Airport Zoning Regulations at WPAFB

The Airport Zoning Regulations around WPAFB were established to promote safety, minimize noise impacts, and support the base's mission readiness by restricting incompatible land uses near flight paths and safety zones. Last updated in 1997, these regulations were evaluated in the CUP to address changes in community growth, advancements in military operations, and emerging compatibility challenges. Revisiting the regulations ensures continued alignment between WPAFB's operational needs and the surrounding community's development, fostering safety, collaboration, and mutual sustainability.



Photo Credit: Wesley Farnsworth

Wright-Patterson Airport Zoning Districts



LEGEND

- | | | |
|---|---|---|
| District 1 – Runway Protection Zone | N/A - Not Applicable | Interstate/US Highway |
| District 2 – 75 to 79 dB DNL Noise Contour | Wright-Patterson AFB | State Route |
| District 3 – 70 to 74 dB DNL Noise Contour | City Boundary | Local Road |
| District 4 – 65 to 69 dB DNL Noise Contour | Township | Runway |
| District 5 – Built-Up Areas | County Boundary | |
| District 6 – Federally Owned Public Lands | | |

How Compatibility Was Identified

Identifying compatibility issues at WPAFB was guided by evaluating social, resource, and development factors, which frame the interaction between military operations and community growth. These factors provided a lens through which compatibility issues, challenges, and opportunities were assessed, ensuring a balanced approach to addressing potential conflicts and opportunities. The process required stakeholder engagement, data analysis, and geospatial mapping to pinpoint critical compatibility issues and prioritize actionable solutions. It underscores the collaborative and data-driven nature of the CUP findings, laying the groundwork for effective and informed strategies.



1 Stakeholder Engagement
Compatibility challenges were identified by engaging regional stakeholders, including local governments, community organizations, and WPAFB representatives. Feedback from these groups highlighted specific issues related to land use, noise, safety, and development.

2 Data Collection & Analysis
Extensive data was gathered from various sources, such as noise contour studies, the Air Installation Compatible Use Zone (AICUZ) report, and regional development plans. This data informed the analysis of existing and potential compatibility challenges.

3 Geospatial Mapping
GIS tools were utilized to visualize compatibility factors such as accident potential zones (APZs), noise contours, and encroachment risks. Compatibility analysis maps clearly show where conflicts exist or could arise.

Compatibility Issues for Wright-Patterson AFB



SOCIAL FACTORS

- ▶ **Land Use:** Development pressures near WPAFB pose risks to operations, particularly from vertical obstructions and dense developments in safety zones.
- ▶ **Noise:** Elevated noise levels from flight operations impact surrounding communities, especially during training exercises.
- ▶ **Communication and Coordination:** Gaps in communication channels hinder timely responses to emerging compatibility issues.



RESOURCE FACTORS

- ▶ **Water Quality and Quantity:** Development impacts water resources, necessitating coordinated management strategies.
- ▶ **Biological Resources:** Wildlife hazards, including bird strikes, remain a concern for flight safety.
- ▶ **Resiliency:** Insufficient planning for infrastructure resiliency affects base operations and community growth.



DEVELOPMENT FACTORS

- ▶ **Transportation:** Regional growth has stressed local transportation networks, vital for base access and mobility.
- ▶ **Safety:** Safety zones near the airfield are increasingly at risk from incompatible land uses.
- ▶ **Dust, Smoke, and Steam:** Localized air quality issues can interfere with visibility and operations.

Strategies to Address the Compatibility Issues

The CUP provides comprehensive strategies to address identified compatibility issues while fostering collaboration between WPAFB and surrounding communities. These recommendations focus on ensuring long-term compatibility, supporting military readiness, and promoting sustainable regional growth. Designed to be practical, consensus-driven, and adaptable, the CUP is a living document requiring regular reviews and updates to address evolving challenges and opportunities.

The success of the CUP depends on the effective implementation of its proposed strategies, with all stakeholders actively contributing to ongoing efforts. A Partnership Committee is recommended to monitor progress, conduct periodic evaluations, and adjust strategies to meet changing circumstances. Collaboration, commitment, and follow-through are essential to maintaining compatibility and achieving mutual success for WPAFB and the surrounding communities.

Key Strategies



LAND USE MANAGEMENT

Collaborate with local governments to adopt zoning policies and land use regulations that prevent incompatible development near WPAFB. This includes restricting high-density residential projects, managing vertical obstructions near flight paths, and encouraging compatible land uses in safety zones



NOISE MITIGATION

Establish community outreach programs to enhance awareness of noise impacts and military operations. Provide incentives for soundproofing homes in high noise areas and create buffer zones to minimize residential exposure to operational noise.



ENHANCED COMMUNICATION & COORDINATION

Form a Wright-Patterson Partnership Committee to oversee compatibility initiatives, foster regular communication among stakeholders, and proactively address emerging concerns. This group will serve as a vital bridge between military and community interests



COMMUNITY ENGAGEMENT

Foster a culture of transparency and mutual understanding by involving residents in planning decisions and hosting informational events. These efforts will build trust, improve awareness, and strengthen relationships between WPAFB and the community



TRANSPORTATION IMPROVEMENTS

Partner with regional authorities to enhance transportation infrastructure, increase road capacity, optimize traffic flow around WPAFB, and ensure networks are resilient to growth pressures

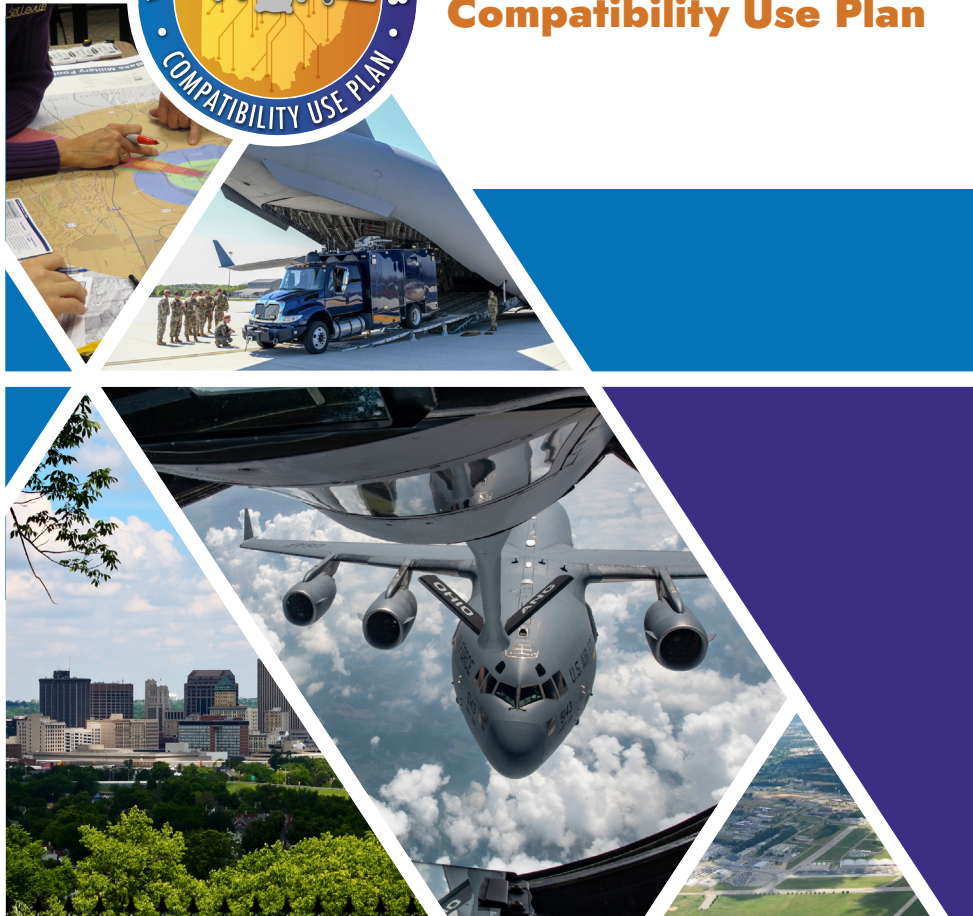


RESILIENCY PLANNING

Implement strategies to enhance infrastructure and environmental resilience, ensuring that base operations and regional growth are sustainable in the face of natural or operational disruptions. This includes addressing water management, energy security, and other critical resource needs.



Wright-Patterson AFB Compatibility Use Plan



The Wright-Patterson AFB Compatibility Use Plan (CUP) is a collaborative effort to ensure the long-term compatibility of military operations and regional development. It provides a roadmap for addressing compatibility challenges and fostering partnerships to support WPAFB's mission and community growth. This document reflects the shared vision of local governments, WPAFB, and regional stakeholders for a sustainable and prosperous future.

For more information or to learn more about the Wright-Patterson AFB
Compatibility Use Plan, please go to www.wright-pattcog.com