

COMPATIBILITY FACTORS



What is Compatibility?

Compatibility, in relationship to military readiness, is the balance and/or compromise between community and military needs and interests. The goal is to promote an environment where both entities can successfully coexist. This Study will assess the following set of 25 potential compatibility factors to determine all current and potential issues.

The highlighted boxes indicate known areas of concern.

SOCIAL FACTORS

 **Communication/Coordination (COM)**

Communication/coordination refers to the level of interaction regarding compatibility issues that occurs among military installations, jurisdictions, land and resource management agencies, and conservation authorities.

 **Legislative Initiatives (LEG)**

Federal, state, or local laws and regulations can have a direct or indirect effect on a military installation's ability to conduct its current or future missions. Legislation can also constrain development potential in areas surrounding an installation.

 **Cultural Resources (CR)**

Cultural resources include objects, documents, properties, and places that have cultural importance. The presence of cultural resources can constrain development or prompt allowances for groups to retain access to them.

 **Public Services (PS)**

This factor addresses intentional and unintentional trespassing onto military lands by unauthorized groups or individuals. The potential for trespassing increases when public use areas are adjacent or very near installation boundaries.

 **Housing Availability (HA)**

Housing availability refers to the supply and demand for housing in a region. It also identifies the competition for housing that may result from changes in the number of military personnel and/or the supply of military family housing provided by an installation.

 **Public Trespassing (PT)**

This factor addresses intentional and unintentional trespassing onto military lands by unauthorized groups or individuals. The potential for trespassing increases when public use areas are adjacent or very near installation boundaries.

RESOURCE FACTORS

 **Air Quality (AQ)**

The primary air quality compatibility concerns are pollutants that limit visibility, may impact health, and/or limit future changes in operations at an installation or in a region.

 **Resilience (RE)**

Military installation resilience refers to the capability of a military installation to prepare for and minimize the effects of extreme weather events, wildfires, or changes in environmental conditions, as well as variables that can adversely affect transportation, logistics, and resources outside of a military installation that are needed to maintain, improve, or rapidly reestablish installation operations.

 **Biological Resources (BIO)**


Biological resources include threatened and endangered species and the habitats they live in or utilize, such as wetlands and migratory corridors. The presence of sensitive biological resources may require special development considerations.

 **Scarce Natural Resources (SNR)**

Public and commercial access to, and use of, scarce natural resources, such as oil, natural gas, minerals, and water, that are located on military installations, within military training areas, or on public lands historically used for military operations can impact military land and resource utilization and operations.

 **Frequency Spectrum Capacity (FSC)**

Frequency spectrum capacity is critical for maintaining existing and future missions and communications on installations. Limited frequency spectrum capacity can also impact civilian cell phone usage and other technology.

 **Water Quality/Quantity (WQQ)**

The assurance that adequate supplies of quality, potable water are available for use by the installation and surrounding communities is a concern with growth and development. Water supply for agricultural and industrial use is also considered.

 **Land/Air Space Competition (LAS)**

The military manages or uses land and air space for testing, training, and operational missions. These resources must be available and of a sufficient size and quality to accommodate effective training and testing.


DEVELOPMENT FACTORS

 **Anti-Terrorism/Force Protection (ATFP)**

Anti-terrorism/force protection refers to the safety of military personnel, facilities, and information from outside threats. Additionally, methods used to protect an installation and supporting facilities can impact off-installation civilian uses.

 **Frequency Spectrum Impedance/Interference (FSI)**

Frequency spectrum impedance and interference refers to the interruption of electronic signals by a structure or object (impedance) or the inability to distribute or receive a particular frequency due to competition for the same or similar frequencies (interference).

 **Light and Glare (LG)**

Light sources from communities at night can cause excessive glare and illumination, impacting the use of military night vision devices and air operations. Conversely, high intensity light, such as that generated from airfield lighting and needed in military areas, may have a negative impact on an adjacent community.

 **Safety (SA)**

Safety zones are areas in which development should be more restrictive due to higher risks to public safety. Safety zones that are considered include accident potential zones, weapons firing range safety zones, and explosive safety zones.

 **Dust/Smoke/Steam (DSS)**

Dust and smoke can be created by fire, ground disturbance, military operations, industrial activities, or other similar processes. Dust, smoke, and steam present compatibility issues if sufficient in quantity to impact military flight operations or impact surrounding communities.

 **Infrastructure Extensions (IE)**

The extension or provision of infrastructure (roads, sewer, water, etc.) in the vicinity of a military installation can be a compatibility concern. Although infrastructure can enhance the operations of the installation by providing needed services, expanded infrastructure can encourage incompatible growth near the installation.

 **Noise (NOI)**

Sound that reaches unwanted levels is referred to as noise. The central issue with noise is its impact, or perceived impact, on people and animals (wild and domestic). Exposure to high noise levels can have a significant impact on human activity, health, and safety.

 **Vertical Obstructions (VO)**

Vertical obstructions are created by buildings, trees, structures, and other features that encroach into navigable airspace used for military operations. Vertical obstructions can present safety hazards for both the public and military personnel.

 **Energy Development (ED)**

Development of energy sources, including renewable sources, can create compatibility issues related to glare (solar energy), vertical obstruction (wind energy), or radar interference (wind energy).

 **Land Use (LU)**

Land use and zoning definitions may be incompatible with military and civilian needs due to the restrictions they place on certain uses. County and local jurisdictions' comprehensive/general plans and zoning ordinances can be tailored to be the most effective tools for avoiding or resolving land use compatibility issues.

 **Roadway Capacity (RC)**

Roadway capacity refers to existing freeway, highway, arterial, and local road capacity for adequate mobility and access between military installations and their surrounding communities.

 **Vibration (V)**

Vibration is an oscillation or motion that alternates in opposite directions and may occur as a result of an impact, explosion, noise, mechanical operation, or other change in the environment. Vibration may be caused by military and/or civilian activities and can impact quality of life.