



EXECUTIVE SUMMARY

What is a Joint Land Use Study?

A Joint Land Use Study (JLUS) is a collaborative land use planning effort between military installations, affected land use planning authorities and regional governments. The JLUS Program is administered by the Department of Defense (DoD) Office of Economic Adjustment (OEA). This JLUS was funded by OEA, the Mid-Region Council of Governments of New Mexico (MRCOG) and the County of Bernalillo.

The JLUS program encourages “cooperative land use planning between military installations and the surrounding communities so that future community growth and development are compatible with the training and operational missions of the installations, and to seek ways to reduce the operational impacts on adjacent land.”¹

A JLUS is a best-faith effort by the community and military installation to compile, analyze and use data, stated requirements and desires for community development to achieve the common goal of planning a compatible future.

Why is a JLUS Needed?

During the past several decades, the Albuquerque region has experienced robust growth that is anticipated to continue. As a consequence, the once isolated Kirtland Air Force Base (AFB) and Albuquerque International Sunport (Sunport) are now adjacent to vibrant community businesses and residences and/or potentially valuable development lands. Given the many land use jurisdictions impacted by activities at Kirtland AFB and the Sunport, the JLUS process allows a comprehensive and collective approach to future regional planning while coordinating individual land use concerns and desires of individual jurisdictions.

The sustainability and long-term viability of Kirtland AFB, the Sunport and the Albuquerque metro area are largely dependent upon each other. In effect, the installation, Sunport and Albuquerque metropolitan area constitute a “virtual ecosystem” that serves the economic and community needs of a large region. One constant of military installations, aviation activities and communities is

change, and the JLUS can be used to help manage these changes.

Program Goals

The primary JLUS Program goal is: to develop a set of recommendations – through close collaboration between military installations and affected local land use and governmental entities – that “present a rationale and justification, and provide a policy framework to support adoption and implementation of compatible development measures designed to prevent urban encroachment; safeguard the military mission; and protect the public health, safety, and welfare.”²

The Kirtland AFB JLUS has the following goals:

- ✓ A comprehensive analysis of issues identified by regional stakeholders and interested citizens.
- ✓ Develop recommendations that protect the health, safety and welfare of communities.
- ✓ Identify regulatory and policy actions to balance sustainment of military and federal agency missions, operations of the Sunport and the region’s future needs and land use vision.
- ✓ Identify land use opportunities and implications from the existing transportation network or plans impacting, or impacted by Kirtland AFB or Sunport operations.
- ✓ Complete a comprehensive economic analysis of Kirtland AFB and its activities.
- ✓ Strengthen relationships between MRCOG and its members, Kirtland AFB, the Sunport and the region.

What Makes This JLUS Challenging?

The majority of JLUS efforts focus on “an” installation and relatively homogeneous region; this is not the case for the Kirtland AFB JLUS that must address a complex and unique set of circumstances. Representative examples of the region’s complexity include: a large number of stakeholders with varying perspectives, visions and goals, as well as operating and political autonomy; Native American tribal interests that require appropriate, government-to-government relationships; a significant number of sensitive and/or national security missions with special requirements; a unique airfield relationship between

¹ Joint Land Use Study Program Guidance Manual, Office of Economic Adjustment, August 2002; p. 2 (“Manual”)

² Description, p. 2.



the Sunport and Kirtland AFB; the desire for an in-depth understanding of the economic impacts of the Sunport and Kirtland AFB – and the ability to clearly communicate that impact to the region’s citizens; an expectation the JLUS will enable – not inhibit – land uses in the region; the need to create consensus throughout the process since no single, regional jurisdiction can mandate recommendations implementation; and the desire to develop recommendations that address transportation issues critical to the region, Sunport and Kirtland AFB.

Kirtland AFB occupies slightly over 80 square miles; provides approximately 34,750 direct, indirect and induced jobs; contributes more than \$4.4 billion annually to the regional economy; represents the largest employment entity in the region and is a critical economic contributor. The majority of people who work on Kirtland AFB live, shop, attend school, worship and recreate in the Albuquerque region. Similarly, the Sunport provides approximately 8,000 jobs and contributes in excess of \$1.4 billion annually to the region’s economy. Employment and spending of Kirtland AFB and the Sunport account for one in every nine regional jobs and 17.5% of all regional wages or salaries.

JLUS Direction

The JLUS was guided by two committees – the JLUS Advisory Committee (AC) and JLUS Technical Committee (TC). Both committees were established at the beginning of the project to provide guidance and input on policy issues; provide overall direction to the process and review study findings and recommendations. Committee members were identified by MRCOG, Kirtland AFB, the Sunport, elected officials and community leaders. The committees included Federal, State, county and community organizations and agencies, as well as Native American; academic, business and community development representatives.

Public Participation

The JLUS process was designed to create a regional, community-based plan to strengthen relationships, build consensus and gain support from the many stakeholders including public and private land owners, residents, elected officials, the many Kirtland AFB associated units, neighboring educational institutions and surrounding tribal governments.

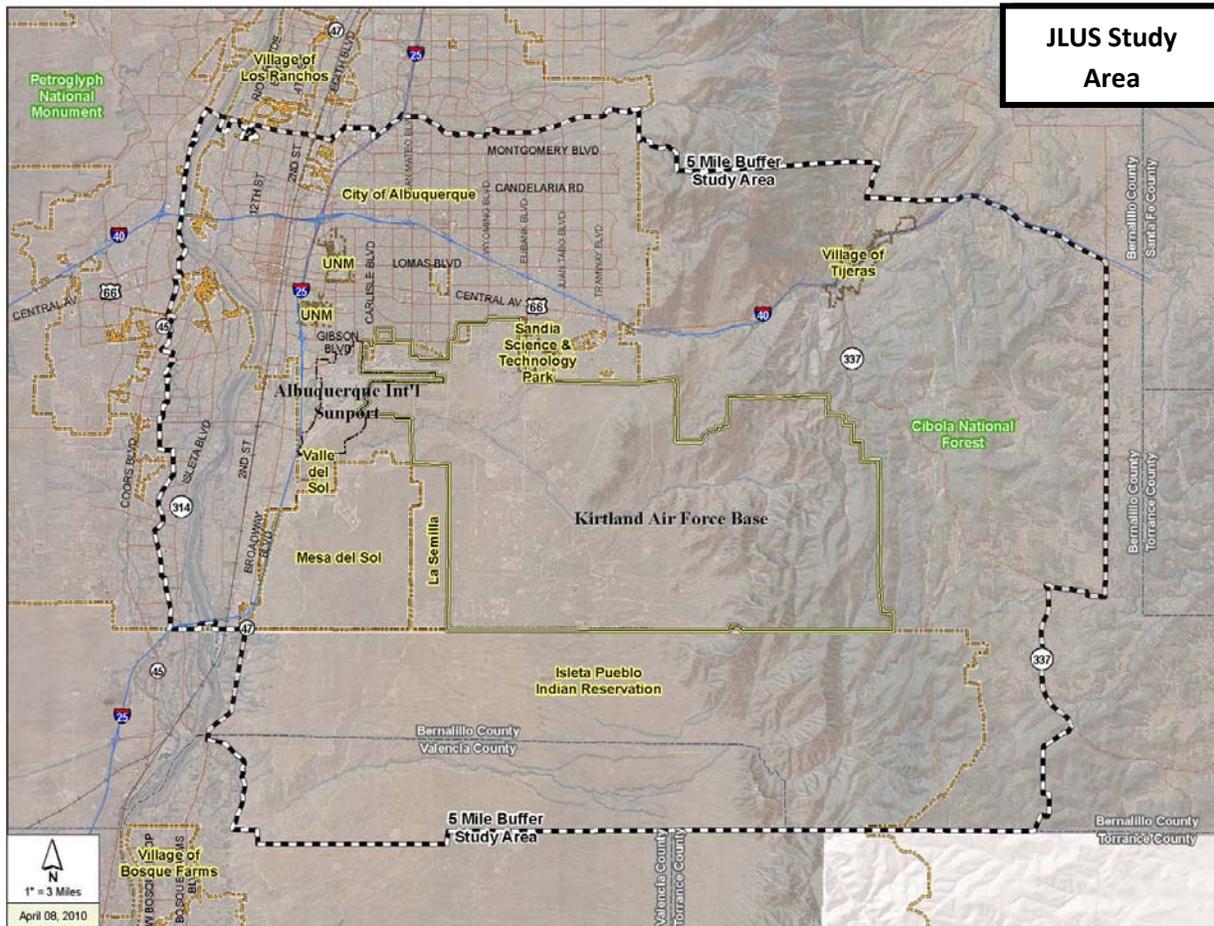
To achieve the Advisory Committee’s objectives for public participation, an outreach process was developed to include a variety of opportunities for interested regional residents and stakeholders to provide input for the study. It included interviews of over 80 representatives of a five-county area and face-to-face meetings with key stakeholders including Kirtland AFB, Pueblo of Isleta, Bernalillo County, Mesa del Sol and both the former and current City of Albuquerque Administrations. Additionally, a web-based public survey was developed and the input received from 1,362 respondents was incorporated in the JLUS analysis.





JLUS Study Area

The JLUS Study Area was created by extending the Kirtland AFB boundaries by approximately 5-miles in all directions to focus JLUS analysis and recommendations on the most appropriate region.



JLUS Organization

The Kirtland AFB JLUS is organized into seven (7) parts

Part	Description	Part	Description
I	Introduction – introductory and background materials.	V	Economic Analysis Summary.
II	Kirtland AFB JLUS Process, Principals and Stakeholders – the organizations involved in the JLUS and how they pursued the goals and objectives.	VI	Transportation Analysis Summary.
III	Compatibility – planning considerations, issue identification and analysis.	VII	Appendices – Important explanatory or supplemental materials and examples of other successful JLUS actions.
IV	Recommendations – The recommendations represent consensus actions the AC considered realistic, achievable and executable to support the “JLUS Objectives.”		



JLUS Analysis and Objectives

The JLUS analysis identified the need to focus on four major objectives and create a series of recommendations that can be adopted by regional jurisdictions and embraced by the business community and residents.

✓ Planning Regionally.

The analysis of land use planning and development adjacent to and around Kirtland AFB and the Sunport indicated few significant problems for the Base and its associates' missions or the conduct of commercial and military aviation operations. However, the lack of significant issues can be attributed more to the historic "spirit of cooperation" in the region rather than a robust, coordinated, collaborative land use planning process. Therefore, establishing procedures and processes to focus on consideration of land use planning and zoning decisions with regional impacts is the first objective.

✓ Sustaining Kirtland AFB.

The analysis of Kirtland AFB operations identified the need to focus on two, distinct types of activity groupings – non-aviation-related and flying missions. Based on clearly articulated Air Force preferences and underscored by over 15 years of base infrastructure analysis and decisions, the military value of the Base is enhanced by having both aviation and non-aviation missions; activities directly supporting national security strategy; unique research and development programs; training of high-value, low-density combat forces; and a host of other characteristics that make Kirtland AFB a special installation for Federal Agencies, not just the Air Force.

Although already home to over 100 agencies and organizations, the Base still has capacity to support additional mission growth. As encroachment issues at other installations adversely impact their capabilities, it is likely DoD will continue to move missions into the "relatively wide-open" Southwest area – Kirtland AFB is well positioned to support that growth and identifying strategies to leverage its enduring capabilities is the second objective.

✓ Sustaining Flying Missions and Long Term Viability of DoD Aviation Activities.

As noted in the foregoing, the analysis identified that the Base is enhanced by hosting both aviation and non-aviation missions. Therefore, the third objective focuses on addressing issues important to the sustainment of flying missions and the long-term viability of the Sunport to support DoD aviation activities. These include flight safety, use of the airdrome by military aircraft, flying training and land use capability near the airfield and training areas.

✓ Enabling Community Development.

One of the primary purposes of the JLUS Program is to identify ways to *balance* sustainment of military missions and community development. The first three objectives focused on the importance of collaborative planning to achieve the desired balance and sustainment of both non-aviation-related and flying missions along with the viability of the Sunport to support future DoD aviation activities. This fourth objective focuses on enabling compatible development, both part of, and apart from, Base activities.

JLUS Recommendations

The heart of any JLUS is the set of strategy recommendations (Part IV) developed to address the JLUS Objectives. JLUS strategies may incorporate a wide range of actions, such as modification of comprehensive planning processes; revisions to land development regulations; changes to controlling activities such as zoning, subdivision regulations, structural height restrictions and increased sound attenuation in existing and new buildings; promotion of planned unit development; purchase or exchange of property; acquiring control of property through land use agreements and restrictions; transfer of development rights; real estate disclosures; etc.

The Kirtland AFB JLUS includes a total of 33 recommendations that are summarized in the following chart, which includes the recommendation number, title, general subject area addressed, suggested implementation timing and brief remarks about the strategy and/or its applicability to the JLUS Objectives.





Number	Title	General Subject Area	Timing (Years)				Remarks
			0-2	3-5	5-10	On-going	
1	Establish a JLUS Implementation Committee	Implementation and Management	X			X	Coordinating JLUS implementation is a local responsibility; however, there is currently no standing, regional organization chartered, empowered or resourced for multi-jurisdictional, regional land use planning.
2	Develop Memoranda of Understanding (MOU)		X			X	A MOU is an agreement between two or more parties that describes a relationship and assigns roles and responsibilities for actions. These agreements are particularly helpful where multi-jurisdictional constituencies may have both shared and disparate interests. The complexity of actions needed and diversity of stakeholders involved in implementing JLUS recommendations suggests there is great value in the use of MOUs.
3	Establish a Regional Planning Forum (RPF)		X				The multi-jurisdictional responsibility for land use that impacts or is impacted by Kirtland AFB and Sunport activities demands a regional approach to sustaining the Base and Sunport existing and potential operations. Currently, there is no RPF-like entity that can facilitate a regional approach to implementing JLUS recommendations and coordinating future land use decisions to ensure the proper balance between mission sustainment and community development.
4	Establish a Kirtland AFB Planning Area (KPA)	Compatible Land Use Planning	X				The KPA is based on an OEA tool to define a geographic planning area identifying where Kirtland AFB and/or Sunport operations may impact surrounding stakeholders or where action by surrounding stakeholders may impact the ability of the Base and Sunport to accomplish its missions. The goal of the KPA is to help regional stakeholders integrate the Base and Sunport mission activities with a comprehensive picture of the region's land use vision.
5	Request an Air Installation Compatible Use Zone (AICUZ) Study	Compatible Land Use Planning	X				The AICUZ program is a DoD program designed to promote compatible land use around military airfields by providing aircraft-related planning information to local officials. The purpose of the AICUZ program is: 1) to promote the public health and safety through the local adoption of compatible land use controls and 2) to protect the operational capability of the air installation. The development of a Kirtland AFB AICUZ would provide a key ingredient to ensuring long range compatible land use for military aviation and missions in the Greater Albuquerque Region.
6	Support Codifying New Mexico Executive Order No. 2004-046 into State Law		X				In the absence of formal land use planning authority for areas around military installations in New Mexico, Governor Bill Richardson issued Executive Order Number 2004-046 in August 2004. The Order's purpose was to ensure compatible land use development near New Mexico's military installations, and the language addresses the need to ensure military missions remain unencroached. Several states have enacted statutes to ensure the requirements endured longer than the administration enacting an Executive Order. The Executive Order's intent and purpose should be continued to preserve the viability of the long-term military mission needs for Kirtland AFB organizations.
7	Support State Designations of Regional Military Influence (RMI)		X			X	A RMI designates a geographic area to recognize the interdependence of military installations, missions, operating areas and training venues. It is a way to add additional emphasis to the need for careful planning to guard against unintended, adverse impacts on defense activities' capabilities. The ability to designate areas where impacts can be made, but that are not necessarily contiguous to a military installation, a RMI extends across the obvious relationships between military installations and their immediate neighbors and directs additional attention to other land use authorities whose actions could affect needed training areas for one or more installations.





8	Pursue Designation as Area of Critical State/Local Concern and Interest	Compatible Land Use Planning	X			X	An Area of Critical State Concern is similar, but more limited than a RMI and can be designated by either state or local government. When designated by a state, the geographic boundaries can be far ranging, but are restricted to state boundaries. When designated by a local government or regional consortium of governments, the boundaries would be restricted to areas over which they have land use authority.	
9	Evaluate Formal Coordination of Local Comprehensive Planning (Plan)		X	X				A Comprehensive Plan is the tool used by counties and municipalities to summarize their long-term vision for growth; outline policies to guide land use decisions; identify development goals and objectives and document priorities. Each Plan is, in effect, a roadmap to that community's future. In the Kirtland AFB region, there are multiple Plans belonging to multiple Stakeholders adding difficulty to the goal of increasing the effectiveness of regional planning efforts. The intent is to evaluate if formal coordination of the comprehensive planning process is possible and valuable. There is no intent for Stakeholders to surrender existing land use or decision making authority.
10	Formalize Relationship Between the Pueblo of Isleta and Kirtland AFB		X				X	The Pueblo of Isleta and Kirtland AFB share a common boundary. Development or significant change in proximity to this boundary by either party can impact activities of the other, possibly in unintended ways. In support of regional planning and recognition of the Pueblo of Isleta as a Sovereign Nation deserving special consideration, it is only natural that a special relationship exists. Historically, there has been good communication between the Pueblo of Isleta and Kirtland AFB leadership.
11	Ensure an Aviator Advisor is Included in Development of Alternative Energy Projects and Leases		X				X	The national impetus on alternative energy development is creating significant activity to take advantage of technologies and geographic areas that can efficiently support them. As these efforts continue, it is essential the potential impacts to flight safety – life and aircraft – presented by these projects are carefully considered. Including an aviator advisor in development of alternative energy projects and leases will provide the technical expertise needed to ensure projects support a safe flying environment and do not encroach on mission accomplishment.
12	Consider Small Area Feasibility Study of Southern Entrance to Kirtland AFB if Base Missions Change							There is considerable interest for enhanced access to the Base from the south. However, Base officials consider threats to operations, safety, and security issues associated with improving southern access would create significant encroachment on existing missions. There could be an opportunity for enhanced southern access in the long-term, but it is dependent upon mission changes for the Base that would eliminate adverse impacts on its missions and allow mitigation of the existing safety and security issues. Currently, there are no existing, planned or anticipated changes.
13	Support Remediation of Unexploded Ordnance (UXO) on Kirtland AFB					X	X	The existence of UXO has been found on and near the perimeter of Kirtland AFB in areas that provide a security buffer to Base operations, but also in areas that are attractive to citizens for recreational use. Environmental remediation of these areas is being addressed by the Base, but the magnitude of the challenge makes full remediation years away.
14	Consider Designations of Clear Zones and Accident Potential Zones for Selected Support Runways		X					Regional land use authorities have the ability to designate acceptable uses for property within their jurisdictions. Using this authority, the City of Albuquerque and Bernalillo County can designate areas at the ends of key Sunport runways as critical safety areas to ensure land uses are compatible with military aviation activities.
15	Consider Acquisition of Property to Ensure Land Use Compatibility	Local Administrative Actions	X			X	There are several ways to acquire property to ensure land use compatibility for existing and potential, future Kirtland AFB missions and Sunport operations. The strategies can be used to acquire property currently entitled or parcels not yet zoned. Options include purchase, donation and condemnation. Although an option, there is no recommendation to revoke entitlements; impact existing, approved developments; or down-zone property. This strategy provides tools that can be used to eliminate existing incompatibilities and provide protection from inadvertently creating new ones.	





16	Consider Acquiring Control of Property to Ensure Land Use Compatibility	Local Administrative Actions	X			X	Where property is not acquired, there are tools to control its use and ensure compatibility with existing and potential, future Kirtland AFB missions and Sunport operations. These include lease, easements, management agreements, purchase of development rights and zoning control.
17	Consider Transfer of Property or Development Rights to Ensure Land Use Compatibility		X			X	In the absence of sufficient funding to purchase or acquire control of property using other strategies, land exchange and transfer of development rights offer additional tools. These tools are similar in that both involve the voluntary shift of development from areas needing protection from certain types of growth to areas where a broader range of land uses are encouraged. Land exchanges involve a transaction other than a sale that transfers land between owners. Transfer of development rights applies to entitled property and does not physically transfer property ownership; rather, it transfers development rights of similar value.
18	Ensure Conditions of Approval and Developer Agreements Support Land Use Compatibility		X			X	Conditions of Approval and Developer Agreements refine land uses by establishing actions required to develop property zoned for specific uses. Land use authorities use these tools to ensure policies requiring actions such as noise disclosures, explosive testing advisory notices, aviation easements, etc., are included in documents transferring real estate ownership between parties.
19	Leverage Capital Improvement Programs		X			X	Capital Improvement Programs are used by government to forecast and budget for capital requirements over time. They help identify needs, develop a timeline for execution and program needed funds. The key to leveraging these programs is early identification and inclusion of information about out-year requirements.
20	Building Codes and Code Enforcement	Building and Structural Codes	X			X	Building codes establish construction requirements to ensure structures are safe and habitable. Acceptable types of building materials and minimum acceptable requirements for structural characteristics, noise attenuation and capacity and configuration of electrical, natural gas, ventilation, plumbing and lighting systems are representative of the subjects addressed with building codes. The primary goal of using building codes is to provide healthy and safe residential and working environments and provide government the means to ensure they will be maintained.
21	Mandatory Referral of Development Applications	Development Review Process	X			X	The most efficient way to evolve a strong, regional planning process is to ensure that appropriate stakeholders' views are solicited as early in the development process as possible. Mandatory review of development applications amongst offices within local governments has long been the standard. Including a mandatory review by Kirtland AFB and Sunport officials of applications that could impact, or be impacted by, their operations will enhance coordination of actions. Also, early input by Kirtland AFB and Sunport officials could identify acceptable alternatives to the initial application and result in enhanced project compatibility.
22	Military Participation on Local Planning Boards		X			X	DoD policy permits installation commanders to advise local planning authorities and government about concerns and anticipated impacts of land use decisions on their base operations. Early involvement of a military representative could provide consistent and professional interaction to support effective and efficient regional planning
23	Mandatory Referral of Documents Requiring Environmental Review					X	Projects and documents requiring National Environmental Policy Act (NEPA) and/or State-mandated environmental review should be referred to Kirtland AFB and the Sunport to ensure their views are solicited as early in the development process as possible. Similarly, Kirtland AFB and Sunport officials should involve appropriate stakeholders in review of their projects that require environmental review. The goal of a robust analysis of actions that significantly impact the human environment would be enhanced by expanded coordination.





24	Regional Transportation Planning and Land Use Compatibility	Compatible Land Use Planning/Local Review Process				X	Coordinated transportation planning is a critical element of regional land use planning. The capacity, effectiveness and efficiency of the individual and collective stakeholders' transportation systems directly impact the quality of life, environmental quality of the region and ability to support Kirtland AFB and Sunport activities. Also, the impact of transportation issues on air quality can have significant implications for Air Force retention and/or growth of aviation activities at Kirtland AFB.
25	Real Estate Disclosures	Local Administrative Actions				X	Disclosures are used to ensure that the sellers, buyers and agents involved in real estate transactions are protected from potential liability for not having informed the other parties of circumstances that may not be evident by simply viewing a property.
26	Real Estate Disclosures – Zoning and Development Agreements	Land Use Regulations	X			X	Disclosures are also important to ensure zoning and development agreements accurately reflect or consider the implications of property encumbrances.
27	Avigation Easements	Local Administrative Actions	X			X	Easements are conditions voluntarily accepted by property owners or purchased by agencies to secure the rights to allow or limit specific property uses or development. An Avigation Easement is a special type of easement tailored to aviation activity. Uses allowed include overflight by aircraft and creation of attendant noise, dust, vibration, etc. or use of the property for landing or aviation-related training – drop of material or personnel, maneuver of troops, etc. Examples of uses restricted include building structures that violate height, lighting or location restrictions or development of land uses that attract birds.
28	Light Control		X			X	Several critical missions conducted by Kirtland AFB organizations rely on dark night sky conditions. One recent comprehensive set of initiatives at fugitive light control are the standards created by the City of Albuquerque, in conjunction with Kirtland AFB, for the Mesa del Sol development. An efficient way to implement formal light controls could be the adoption of these standards for regulatory amendments to zoning or development agreement approval by other stakeholders. These standards should be enforced for all new development, as well as for renovations and retrofits of existing fixtures
29	Preserve La Semilla as a Buffer	Other	X			X	La Semilla exists as a 100-year DOE lease from the State Land Office for the express purpose of insulating a portion of Kirtland AFB from surrounding land adjacent to the southwestern portion of the base and its potential, future development. Any development within the buffer or modification to the currently agreed-to use of the buffer could present a form of encroachment on the installation impacting both DoD and DOE missions.
30	Fuel Plume and Mixed Waste Landfill Advisories		X			X	While neither the Fuel Plume nor Mixed Waste Landfill represents a current land use issue, they are both high visibility issues of significant interest to the DOE, Air Force, State and local governments, and local communities that are in close proximity to impacted areas. DOE and Kirtland AFB hold a joint, semi-annual environmental public meeting to update local residents and interested parties regarding all environmental issues on the Base that includes the Fuel Plume and Mixed Waste Landfill. In addition to these two public meetings, Kirtland AFB posts all briefings and information relevant to the fuel plume characterization and remediation on its public website; holds quarterly meetings with a Citizens Advisory Board; and meets with local neighborhood associations regularly to demonstrate the Base's commitment to public participation and information sharing on plume remediation.





31	Ensure Compliance with FAA Parts 77 and 150	Land Use Regulations		X	X	The requirements of FAA Parts 77 and 150 are fundamental to the Sunport retaining certification as a civilian airfield. FAA Part 77 addresses obstructions of navigable airspace and compliance is mandatory. FAA Part 150 provides the basis for aircraft noise analysis and noise contour mapping of civilian airports. And compliance with its planning guidance is voluntary, but an approved Part 150 is a primary vehicle to obtain approval for applications for federal grants for noise abatement programs.
32	Biennial Press Release Concerning Economic and Employment Impacts of Kirtland AFB and the Sunport	Other		X	X	Ensuring regional citizens, as well as government and planning officials, remain cognizant of regional economic reliance on the Base and Sunport could help create a broad-based consensus on encouraging compatible land uses and discouraging those that would adversely impact Base or Sunport missions. The intent should be to ensure that the overall regional impact is highlighted and citizens do not incorrectly attribute the economic and employment benefits to only jurisdictions immediately adjacent to Kirtland AFB and the Sunport.
33	Pursue Mission Growth and Seek New Missions for Kirtland AFB				X	Kirtland AFB is a large installation and hosts a diverse group of missions and units and has the capacity to support mission growth. Also, the flying conditions, access to valuable training ranges and airspace and investments in specialized equipment could be attractive for additional or emerging, new missions.

Next Step

The executive summary provides the focus and recommendations from the Kirtland AFB JLUS, but it is not intended as a standalone document. The main body of the JLUS contains the majority of analysis and results; however, there is a wealth of supplemental information in the appendices.

The communities and jurisdictions comprising the MRCOG region and others in New Mexico where Kirtland AFB units train historically support Kirtland AFB missions. However, impacts from recent population growth and projected growth over the next decade require a more coordinated approach to local land use planning to protect Kirtland AFB assets and facilities used for training and to support national security functions. A coordinated approach should fully consider the land use needs and desires of regional jurisdictions and the Base to ensure Kirtland AFB's varied missions and organizations can be sustained into the future.

Part III (Compatibility) of the JLUS is especially critical to understanding why the thirty-three (33) recommendations detailed in Part IV (Recommendations) are made. Responsibility for prioritizing and implementing the recommendations continues with the JLUS stakeholders. At this point, recommendation consideration and implementation should begin to ensure local communities, jurisdictions, stakeholders and the Base will benefit from future efforts that are carefully coordinated and fully supported.

Due to increasing land use complexity and competition, onetime fixes or occasional intervention in land use decisions by elected leaders across the region may be insufficient to sustain Kirtland AFB missions and Sunport operations. The need for land use coordination and cooperation is important because the Base's missions are critical to national security, and the economic impacts from Base and Sunport operations on the region's economy are significant. The key to sustaining Kirtland AFB missions and Sunport operations is – and will remain – JLUS stakeholder coordination and cooperation in the MRCOG region.

Complete JLUS Information

The Kirtland AFB JLUS can be accessed through the MRCOG website at: <http://www.mrcog-nm.gov/>

