

Agenda Submittal

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Type:	ALUC-Document	Department:	Airport Land Use Commission
File #:	AC 23-015	Contact:	Nedzlene Ferrario, 784-6765
Agenda date:	03/09/2023	Final Action:	
Title:	ALUC-23-02 (Solano County General Plan Amendments)		

Determine that Application No. ALUC-23-02 (Solano County) to amend General Plan policies related to the development of wind energy facilities and their potential impact on Travis Air Force Base is consistent with the Travis Air Force Base, Rio Vista and Nut Tree Airports Land Use Compatibility Plans

Governing body: Airport Land Use Commission

District:

Attachments: A - [Airport Compatibility & Airport Land Use Planning Guidance Criteria](#), B - [General Plan Amendments - Redline](#), C - [Airport Compatibility Zones](#)

Date:	Ver.	Action By:	Action:	Result:
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RECOMMENDATION:

Determine that Application No. ALUC-23-02 (Solano County General Plan amendments) to amend General Plan policies related to the development of wind energy facilities and their potential impact on Travis Air Force Base is consistent with the Travis Air Force Base (TAFB), Rio Vista and Nut Tree Airports Land Use Compatibility Plans.

SUMMARY

The importance of Travis Air Force Base (TAFB) to national defense and the local economy is well documented. TAFB also plays an important role in monitoring private commercial air traffic in the Bay area. The impacts of wind farms on an airport's radar system have been observed nationally and is acknowledged by the wind turbine industry. Specifically, wind farms appear as aircraft entering the area on an airport's radar imagery. Wind turbine development in the vicinity of TAFB has caused such impacts to the TAFB traffic control system. Despite multiple efforts to address this impact, thus far the issue has not been solved and any further expansion of wind turbine projects in the vicinity of TAFB would further erode the radar system and be detrimental to operations.

To address this impact and protect the TAFB mission, the Board adopted an interim ordinance restricting the approval of new permits for commercial wind turbines and wind farms in unincorporated Solano County in 2021. This interim ordinance was adopted to allow time to evaluate current policies and implementation measures to reduce impacts on TAFB resulting from the development of new commercial wind turbines and wind farms within the TAFB radar field of view. The interim ordinance is set to expire on April 6, 2023.

Solano County has referred an application to amend the Land Use and Resource Chapters of the General

Plan to include policies that address the potential impacts to TAFB resulting from additional large-scale commercial wind turbine development in Solano County. The draft amendments propose policy restrictions against the development of new wind facilities over 100 feet in height that are within the line of sight of TAFB radar. The proposed amendments are also intended to bring the General Plan into consistency with the TAFB Airport Land Use Compatibility Plan (LUCP). The specific amendments are included in Attachment A.

The proposed policies would apply to the unincorporated areas of Solano County rather than areas within City limits. Certain compatibility zones lie within the respective City Limits; therefore, criteria evaluation is not applicable and consistency findings for those situations are not required. However, staff provided an evaluation of compatibility zones applicable to the unincorporated area. In addition, the proposed policies are consistent with the Wind Turbine Facilities policies (Section 5.6.1) of the TAFB LUCP.

Based on review, staff recommends the ALUC find that the proposed updates comply with the requirements of these zones to protect flight, meet guidance criteria of the California Airport Land Use Planning Handbook, and are consistent with the TAFB, Rio Vista and Nut Tree Airports Land Use Compatibility Plans (Attachment A).

DISCUSSION:

Background

The Solano County General Plan, adopted in 2008, generally encourages the development of commercial wind energy generation facilities to support renewable energy production, particularly in the Collinsville area and other areas south of Highway 12, but provides that proposals for new facilities should not be approved if the facility would cause conflicts with the mission of TAFB. The General Plan also provides that future development of wind energy within Solano County must be consistent with the ALUCP adopted by the Solano County Airport Land Use Commission for TAFB.

In 2013, Solano County prepared a Joint Land Use Study (JLUS) to analyze and address a variety of issues, including the potential impacts of commercial wind and solar facilities on TAFB. The JLUS concluded that large wind turbines over 100 feet in height can provide false readings on the radar system that TAFB uses. In 2015, as a result of the JLUS findings, the Airport Land Use Commission (ALUC) adopted an update to the TAFB Land Use Compatibility Plan that limited wind turbine height in the line of sight of TAFB radar. The 2015 plan recommends that no new commercial wind turbines be located within the line-of-sight of the TAFB Digital Airport Surveillance Radar (DASR) and that proposals for new commercial turbines provide individual line-of-sight analyses to demonstrate that the turbine is not within the line-of-sight of the TAFB DASR. Because the County's General Plan already provides that new commercial wind projects must be consistent with the TAFB LUCP, there is no inconsistency between the General Plan and the 2015 LUCP. However, the General Plan does not explicitly reference the line-of-sight analysis recommended by the 2015 TAFB LUCP.

In 2018, TAFB, Solano County, and the cities of Fairfield, Suisun City, Vacaville, and Vallejo engaged in a collaborative planning effort to reduce or prevent encroachment issues associated with current and future missions at the base and growth in the local communities. The product of this collaborative planning effort was the TAFB Sustainability Study. This study notes that development of new commercial wind turbines south of TAFB, or replacement of existing turbines with taller models, impact the TAFB DASR field of view. The study concludes that regulating the siting of future wind facilities based on the recommendations made in the 2015 ALUCP would adequately address any potential adverse impacts to the DASR.

Considering the recommendations made in the 2015 TAFB LUCP and the conclusions expressed in the 2018 Travis Sustainability Study, Solano County proposes to update and amend its General Plan to do the following:

- Prohibit the development of new commercial wind energy generation facilities north of Highway 12;
- Explicitly require that any proposals for new or modified commercial wind energy generation facilities provide line-of-sight analyses demonstrating that each new or modified turbine within the facility is not within the line-of-sight of the TAFB DASR.
- Explicitly recognize that larger commercial wind energy generation facilities can and do have adverse impacts on the TAFB DASR, and thereby negatively impact the operations and mission of Travis Air Force Base;
- Retain existing General Plan policies that generally encourage the development and use of renewable energy sources, but clarify as County land use development policy that the protection of the operations and mission of TAFB takes priority over the development of new commercial wind energy generation facilities or the modification of existing facilities to increase their production capacity.

Proposed Policies

The County proposed General Plan text amendments include new policies and background text to the Land Use and Resource Chapter of the General Plan. Specifically, the proposed amendments would add language that would focus on renewable energy other than wind energy in the Collinsville-Montezuma Hills area, require siting of energy facilities in a manner compatible with TAFB, prohibit new commercial and non-commercial wind turbines greater than 100 feet in height located north of Highway 12 and Suisun Marsh Preservation Area, or within line of sight of the TAFB Digital Airport Surveillance Radar (DASR) installations, places restrictions on replacement of turbines

The proposed new policies are as follows:

- RS.P-58A:** New commercial wind energy facilities and noncommercial wind turbines greater than 100 feet in height are inappropriate in areas north of Highway 12 and the Suisun Marsh Preservation Area.
- RS.P-58B:** No wind turbine greater than 100 feet in height, measured at the apex of the blade at its highest point, shall be within a line-of-sight of the Travis AFB Digital Airport Surveillance Radar (DASR) Radar Installation. All commercial wind turbine facilities and non-commercial wind turbines greater than 100 feet in height shall provide an individual radar line-of-sight analysis to demonstrate that the placement of the proposed facility or wind turbine is not within a line-of-sight to the Travis DASR Radar Installation.
- RS.P-58C:** Existing commercial and non-commercial wind turbines may be replaced only if the replacement turbine has dimensions and materials similar to the original. Replacement turbines that are significantly taller than the original or built with materials that are significantly more reflective than the original, shall be subject to policy RS.P-58B.
- RS.P-58D:** Policies RS.P-58B and RS.P-58C implement the Airport Land Use Commission's 2015 Airport Land Use Plan for Travis Air Force Base. For that reason, these two policies will remain in effect through December 31, 2028, unless amended prior to then by the Board of Supervisors due to changes in wind turbine designs, radar technology, or radar impact modeling methods. After December 31, 2028, policy RS.P-58E shall become effective.
- RS.P-58E:** An applicant proposing installation or replacement of a wind turbine generator greater than 100 feet in height shall model anticipated impacts to verify that there will be no net increase in radar interference above baseline to Travis Air Force Base, using a modeling methodology of proven reliability. The applicant must demonstrate that the project will cause no measurable decrease in the ability of the Travis Air Force Base air navigation radar to detect targets. In addition, the applicant must demonstrate that the project will not negatively impact existing or anticipated flight

operations of Travis Air Force Base.

AIRPORT PLANNING CONTEXT & ANALYSIS

General Plan amendments must undergo review by the ALUC for consistency with the applicable LUCPs (State Aeronautics Act section 21676). The California Department of Transportation (Caltrans) Division of Aeronautics has published the California Airport Land Use Planning Handbook (Caltrans Handbook) as a guide for Airport Land Use Commissions (ALUCs) in the preparation and implementation of Land Use Compatibility Planning and Procedure Documents. Section 6.4.2 of the Caltrans Handbook establishes the guidance appropriate for reviewing general plan amendments, zoning ordinances and building regulations. This section references Table 5A of the Caltrans Handbook which presents the consistency requirements for "Zoning or Other Policy Documents."

The proposed policies, as adopted will apply to the unincorporated areas. Staff evaluated the proposal using the Zone Compatibility criteria for Travis AFB LUCP, Nut Tree and Rio Vista Airport Land Use Compatibility Plan, and the consistency test criteria contained in the California Airport Land Use Planning Handbook. Certain compatibility zones lie within the respective City Limits; therefore, criteria evaluation is not applicable and consistency findings for those situations not required. However, staff provided an evaluation for compatibility criteria for Compatibility Zones applicable to the unincorporated area.

Staff analysis of the project based on this evaluation is summarized in Attachment A.

Based on review, staff finds that the proposed project complies with the requirements of the zones to protect flight, meet guidance criteria of the California Airport Land Use Planning Handbook, and are consistent with the Travis AFB Land Use Compatibility Plan, Rio Vista and Nut Tree Airport Land Use Compatibility Plan.

Attachments:

[A - Airport Compatibility Zones & Airport Land Use Planning Guidance Criteria](#)

[B - General Plan amendments - Redline](#)

[C - Airport Compatibility Zones Map](#)

D - Resolution (To Be Distributed by Separate Cover)

General Plan Amendments ALUC 23-02 (County of Solano)

TRAVIS AFB LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Zone A			
Max Densities – residential – 0 du/acre, Indoor uses – 0; Outdoor uses – 5 people/acre, Max people per acre – 5/acre	X		Zone A is within City Limits. Proposed policies do not apply to property within City Limits.
Prohibited uses: all structures except aeronautical facilities with location set by US Dept of Defense Criteria, assemblages of people, above-ground bulk storage of hazardous materials, hazards to flight	X		Same as above
Additional Zone A Criteria			
Avigation easement dedication; WHA required for projects that have the potential to attract wildlife hazards	X		Same as above
Portions of Zone B1 are within unincorporated areas. The following criteria apply			
Maximum residential density – 0; Indoor uses – 15 people/acre; Outdoor – 20 people/acre; Max people per single acre – 30 /acre	X		The proposed policies do not increase densities
Prohibited uses: children schools, day care centers, libraries, hospitals, nursing homes, hazards to flight, theaters, meeting halls any other assembly uses, office buildings . 3 stories, labor intensive uses, stadiums, group recreational use, hospitals, nursing homes	X		The proposed policies do not apply to such uses
Within Bird Strike Hazard Zone WHA required for projects that have potential to attract wildlife	X		The proposed policies do not attract wildlife
Additional Zone B1 Criteria			
Locate structures maximum distance from extended runway centerline	X		The proposed policies do not impact the runway
Minimum NLR of 40 dB in buildings	X		The proposed policies do not impact noise
All new objects >35 feet AGL; Avigation easement required	X		The proposed policies do not propose structures
All proposed wind turbines must meet line-of-sight criteria in Policy 3.4.4	X		No wind turbines proposed
All new or expanded commercial-scale solar facilities must conduct an [Solar Glare Hazard Analysis Tool (SGHAT)] glint and glare study for ALUC review	X		No commercial solar proposed
Portions of Zone B2 is within unincorporated areas. The following criteria apply			
Maximum residential density - see Policy 4.2.1; Indoor – 25 people/acre, Outdoor – 40 people/acre, Max people/single acre - 60	X		The proposed policies do not increase densities
Prohibited uses: children schools, day care centers, libraries, hospitals, nursing homes, highly noise-sensitive uses (e.g.outdoor theaters), above ground build storage of hazardous materials, hazards to flight	X		The proposed policies do not apply to such uses

General Plan Amendments ALUC 23-02 (County of Solano)

TRAVIS AFB LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Minimum NLR of 35 dB in residences (including mobile homes) and buildings with noise-sensitive uses; Avigation easement required	X		The proposed policies do not attract wildlife
All proposed WTG must meet line-of-sight criteria in Policy 5.6.1(b)	X		No wind turbines proposed
For areas within the Bird Strike Hazard Zone, reviewing agencies shall prepare a [wildlife hazard analysis (WHA)] for discretionary projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use.	X		The proposed policies do propose hazards to flight
For areas outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use involving discretionary review that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA.	X		The proposed policies do not propose hazards to flight
Zone C			Zone C is within unincorporated areas. The following criteria apply
Maximum residential density – 11 du/ac Indoor uses – 75 people/acre Outdoor – 100 people/acre Max people in single acre – 300/acre	X		The proposed policies do not increase densities
Prohibited uses: children schools, day care centers, libraries, hospitals, nursing homes, hazards to flight	X		The proposed policies do not apply to such uses
Minimum NLR of 20dB in residences and buildings, Deed Notice required	X		The proposed policies do not impact noise
All new objects 100 feet AGL require ALUC review	X		No objects over 100 feet proposed
All proposed wind turbines must meet line-of-sight criteria in Policy 3.4.4	X		No wind turbines proposed
All new or expanded commercial-scale solar facilities must conduct an [Solar Glare Hazard Analysis Tool (SGHAT)] glint and glare study for ALUC review	X		No commercial solar proposed
All new or expanded meteorological towers > 100 feet AGL, whether temporary or permanent, require ALUC review	X		No meteorological tower over 100 feet proposed
For areas outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use involving discretionary review that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA.	X		The proposed policies do not propose hazards to flight
No hazards to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land uses that may attract birds to increase in the area shall be permitted.”	X		The proposed policies do not propose hazards to flight

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TRAVIS AFB LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
For areas within the Bird Strike Hazard Zone, reviewing agencies shall prepare a [wildlife hazard analysis (WHA)] for discretionary projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use.	X		The proposed policies do not propose hazards to flight
Zone D			Portions of the unincorporated area lie within Zone D
Max Densities – No limits	X		The proposed policies do not increase densities
Prohibited uses: hazards to flight	X		The proposed policies do not propose hazards to flight
ALUC review required for objects > 200 feet AGL	X		No objects over 200 feet proposed
All proposed wind turbines must meet line-of-sight criteria in Policy 5.6.1(b)	X		No wind turbines proposed
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review	X		No commercial solar proposed
All new or expanded meteorological towers > 200 feet AGL, whether temporary or permanent, require ALUC review	X		No towers proposed
For areas within the Bird Strike Hazard Zone, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use.	X		The proposed policies do not propose hazards to flight
For areas outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA.	X		The proposed policies do not propose hazards to flight
Zone E			
Max Densities – No limits	X		The proposed policies do not increase densities
ALUC review required for objects > 200 feet AGL	X		No objects over 200 feet proposed
All proposed wind turbines must meet line-of-sight criteria in Policy 5.6.1(b)	X		No wind turbines proposed
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review	X		No commercial solar proposed
All new or expanded meteorological towers > 200 feet AGL, whether temporary or permanent, require ALUC review	X		No towers over 200 feet proposed
Outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use that has the potential to attract the movement of wildlife that could	X		The proposed policies do not propose hazards to flight

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TRAVIS AFB LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
cause bird strikes are required to prepare a WHA.			

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RIO VISTA AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Zone 1			Zone 1 is located within City Limits. The following criteria do not apply
Max Densities – residential – 0 du/acre, nonresidential - 0 people per acre, single acre/clustered development – 0 people per acre	X		Same as above
Prohibited uses: Assemblages of people, objects penetrating the Title 14 CFR Part 77 imaginary surfaces, structures and residential land uses, hazards to flight	X		Same as above
Avigation easement dedication.	X		Same as above
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).	X		Same as above
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Same as above
Zone 2			Portions of the unincorporated area lie within Zone 2
Max Densities – residential – 1 du per 10 acre, nonresidential - 40 people per acre, single acre/clustered development – 80 people per acre	X		The proposed policies do not increase densities
Prohibited uses: Children’s schools, day care centers, theaters, meeting halls, and other assembly uses, office buildings >3 stories in height, labor-intensive industrial uses, stadiums, group recreational uses, hospitals, nursing homes, highly noise-sensitive uses, aboveground bulk storage of hazardous materials, hazards to flight	X		The proposed policies do not propose such uses
Locate structures at a maximum distance from extended runway centerline.	X		The proposed policies do not propose structures
Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4).	X		The proposed policies do not impact noise sensitive uses
ALUC review required for objects ≥ 35 feet AGL.	X		The proposed policies do not propose objects over 35 feet high
Avigation easement dedication.	X		Not required
See Policy RE-1 pertaining to all proposed wind turbines.	X		Not applicable
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the	X		The proposed policies do not propose hazards to flight

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RIO VISTA AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).			
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Not applicable
Zone 3			Portions of the unincorporated area lie within Zone 3
Max Densities – residential – 1 du per 2 acre, nonresidential - 70 people per acre, single acre/clustered development – 210 people per acre	X		The proposed policies do not increase densities
Prohibited uses: Children’s schools, day care centers, stadiums, group recreational uses, hospitals, nursing homes, major shopping centers, theaters, meeting halls, and other assembly uses, highly noise-sensitive uses, hazards to flight	X		The proposed policies do not propose such uses
Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4).	X		The proposed policies do not impact noise sensitive uses
ALUC review required for objects ≥ 50 feet AGL.	X		The proposed policies do not propose objects over 35 feet high
Avigation easement dedication.	X		Not required
See Policy RE-1 pertaining to all proposed wind turbines.	X		Not applicable
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).	X		The proposed policies do not propose hazards to flight
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Not applicable
Zone 4			Portions of the unincorporated area lie within Zone 4
Max Densities – residential – 1 du per 2 acre, nonresidential - 100 people per acre, single acre/clustered development – 300 people per acre	X		The proposed policies do not increase densities
Prohibited uses: Children’s schools, day care centers, stadiums, group recreational uses, hospitals, nursing homes, highly noise-sensitive uses, hazards to flight	X		The proposed policies do not propose such uses
Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4)	X		The proposed policies do not impact noise sensitive uses
ALUC review required for objects ≥ 100 feet AGL (see Policy H-2).	X		The proposed policies do not propose objects over 100 feet high

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RIO VISTA AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
See Policy RE-1 pertaining to all proposed wind turbines.	X		Not required
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
All new or expanded meteorological towers > 100 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1).	X		The proposed policies do not propose towers over 100 feet.
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).	X		The proposed policies do not propose hazards to flight
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Not applicable
Zone 5			Portions of the unincorporated area lie within Zone 5
Max Densities – residential – 1 du per 1 acre, nonresidential - 70 people per acre, single acre/clustered development – 210 people per acre	X		The proposed policies do not increase densities
Prohibited uses: Highly noise-sensitive uses, hazards to flight, children's schools, large daycare centers, stadiums, group recreational uses, hospitals, nursing homes	X		The proposed policies do not propose such uses
Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4)	X		The proposed policies do not impact noise sensitive uses
ALUC review required for objects ≥ 200 feet AGL (see Policy H-2).	X		The proposed policies do not propose objects over 200 feet high
See Policy RE-1 pertaining to all proposed wind turbines.	X		Not required
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1).	X		The proposed policies do not propose towers over 200 feet.
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).	X		The proposed policies do not propose hazards to flight
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Not applicable

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RIO VISTA AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Zone 6			Portions of the unincorporated area lie within Zone 6
Max Densities – residential – no limit/consider noise and overflight, nonresidential - 200 people per acre, single acre/clustered development – 800 people per acre	X		The proposed policies do not increase densities
Prohibited uses: hazards to flight	X		The proposed policies do not propose such uses
Maximum interior noise level of CNEL 45 dB in buildings with noise-sensitive uses (see Policy NP-4)	X		The proposed policies do not impact noise sensitive uses
ALUC review required for objects ≥ 200 feet AGL (see Policy H-2).	X		The proposed policies do not propose objects over 200 feet high
See Policy RE-1 pertaining to all proposed wind turbines.	X		Not required
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1).	X		The proposed policies do not propose towers over 200 feet.
Within the Inner WHA Boundary, reviewing agencies shall prepare a WHA for projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use (see Policy WH-1).	X		The proposed policies do not propose hazards to flight
Refer to the Compatibility Zone D standards found in the Travis AFB LUCP.	X		Not applicable
Zone 7			Portions of the unincorporated area lie within Zone 7
Max Densities – residential – 0 du/acre, nonresidential - 0 people per acre, single acre/clustered development – 0 people per acre	X		The proposed policies do not increase densities
Prohibited uses: Wildlife hazard attractants	X		The proposed policies do not propose such uses
For areas outside of the Inner WHA Boundary but within the Outer WHA Boundary, any new or expanded land use that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA (see Policy WH-2).	X		The proposed policies do not impact noise-sensitive uses
All discretionary projects located within the Inner WHA Boundary and Outer WHA Boundary are required to consider the potential for the project to attract hazardous wildlife, wildlife movement, or bird strike hazards as part of environmental review process required by the California	X		The proposed policies do not propose hazards to flight

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RIO VISTA AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Environmental Quality Act (CEQA) (see Policy WH-3).			
ALUC review required for objects ≥ 200 feet AGL (see Policy H-2).	X		The proposed policies do not propose towers over 200 feet.
See Policy RE-1 pertaining to all proposed wind turbines.	X		The proposed policies do not propose wind turbines
All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review (see Policy RE-2).	X		The proposed policies do not propose commercial solar
All new or expanded meteorological towers ≥ 200 feet AGL, whether temporary or permanent, require ALUC review (see Policy H-1).	X		The proposed policies do not proposed towers over 200 feet

General Plan Amendments ALUC 23-02 (County of Solano)

NUT TREE AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Zone A			Zone A is located within City Limits. The following criteria do not apply
Max Densities: residential – 0 du/acre, other uses/in structures – 10; in/out of structure – 15 people/acre, required open land – 65%	X		Same as above
Prohibited uses: assemblage of people; new structures >FAR 77 height limits; noise sensitive uses	X		Same as above
No uses hazardous to flight	X		Same as above
Avigation easement	X		Same as above
50ft. setback from extended runway centerline for all structures	X		Same as above
Zone B			Zone B is located within City Limits. The following criteria do not apply
Max Densities: residential – 0.3 du/acre, other uses/in structures – 20; in/out of structure – 40 people/acre, required open land – 50%	X		Same as above
Prohibited uses: noise sensitive uses; schools, libraries, hospitals, nursing homes; involving substantial amount of highly flammable or explosive materials	X		Same as above
Structures to be as far as possible from extended runway centerline	X		Same as above
Minimum NLR ⁸ of 25 dBA in residential and office buildings	X		Same as above
No uses hazardous to flight	X		Same as above
Avigation easement	X		Same as above
Zone C			Zone B is located within City Limits. The following criteria do not apply
Max Densities: residential – 1 du/acre, other uses/in structures – 50; in/out of structure – 75 people/acre, required open land – 15%	X		Same as above
Prohibited uses: schools, libraries, hospitals, nursing homes; noise sensitive outdoor activities	X		Same as above
Residential structures, especially mobile homes, to have a minimum NLR of 20 dBA	X		Same as above
Clustering of development is encouraged	X		Same as above
No uses hazardous to flight	X		Same as above
Avigation easement	X		Same as above
Zone D			Zone A is located within City Limits. The following criteria do not apply
Max Densities: residential – 4 du/acre, other uses/in structures – 100; in/out of structure – 150 people/acre, required open land – 10%	X		Same as above
Prohibited uses: noise sensitive outdoor activities	X		Same as above
Residential structures, especially mobile homes, to have a minimum NLR of 20 dBA	X		Same as above
Clustering of development is encouraged	X		Same as above
No uses hazardous to flight	X		Same as above
Overflight easement	X		Same as above

General Plan Amendments ALUC 23-02 (County of Solano)

NUT TREE AIRPORT LAND USE COMPATIBILITY ZONE CRITERIA			
Compatibility Zone Criteria	Consistent	Not Consistent	Comment
Zone E			Zone A is located within City Limits. The following criteria do not apply
Max Densities: residential – 6 du/acre	X		Same as above
Prohibited uses: Highly noise sensitive outdoor activities; e.g. amphitheaters	X		Same as above
Residential uses should have limited outdoor living area and should be oriented away from noise source, clustering is encouraged	X		Same as above
No uses hazardous to flight	X		Same as above
Overflight easement	X		Same as above
Zone F			Portions of unincorporated area lie within Zone F
Max Densities: other uses/in structures – 9	X		The proposed policies do not increase densities
Overflight easement dedication	X		Not required

General Plan Amendments ALUC 23-02 (County of Solano)

California Airport Land Use Planning Handbook Criteria

California Airport Land Use Planning Handbook Criteria	Consistent	Not Consistent	Comment
Intensity Limitations on Nonresidential Uses	X		The proposed policies do not change densities or intensities
Identification of Prohibited Uses	X		The proposed policies do not propose prohibited uses
Open Land Requirements	X		Not applicable
Infill Development	X		Not applicable
Height Limitations and Other Hazards to Flight	X		The proposed policies do not proposed height or hazards to flight
Buyer Awareness Measures	X		Not applicable
Non-conforming Uses and Reconstruction	X		Not applicable

General Plan Amendments to address new Wind Turbines

Chapter 2

Page LU-27

Travis Air Force Base

Travis AFB occupies approximately 7,100 acres of land, with two 11,000-foot runways oriented along the northeast-southwest diagonal away from existing housing developments. Travis AFB is home to the world's largest military airlift unit, the 60th Air Mobility Wing, and the wing's reserve counterpart, the 349th Air Mobility Wing. In 1995, the function of the base was expanded by the addition of air refueling assets from March AFB. In 2013, function of the base was further expanded by the construction of an Assault Landing Zone, a short runway used to train military pilots in low altitude tactical approaches, landings, and departures. The U.S. Department of Defense has been using the site for military operations since the early 1940s.

The public is interested in protecting the viability of Travis AFB, and as a part of that effort, in preventing the introduction of incompatible land uses in the vicinity. This change has arisen largely from two factors. One is a heightened awareness of the economic importance of Travis AFB. Secondly, the large number of military base closures in California in recent years, together with the ongoing program of the federal government to eliminate unneeded military bases throughout the country, has raised community concerns about the future of Travis AFB. In light of these factors, the need to ensure long-term land use compatibility between the base and its environs has become a high community priority.

In ~~June 2002~~October 2015, the Solano County ALUC adopted an updated ALUCP, ~~now called the~~ for Travis AFB ~~Land Use Compatibility Plan (Travis LUCP)~~. The Travis ALUCP addresses restrictions on residential development using compatibility zones. Nonresidential development is also addressed by the Travis ALUCP according to the number of people per acre, ~~and~~ established the noise sensitivity of different land uses and activities, and the potential for development to create safety hazards to airport operations. In December 2013, the Solano

County ALUC amended the Travis ALUCP to include an Assault Landing Zone Training Area Overlay, where structures greater than 200 feet in height would be incompatible with operation of the Assault Landing Zone. Figure LU-6 indicates the area in which new development must be compatible with the Travis ALUCP. ~~Please see the Travis LUCP for additional information governing actions in the compatibility zones.~~ Various policies of the General Plan relating to new development have been updated to ensure that the General Plan remains consistent with the recommendations made in the Travis ALUCP.

The Travis Air Force Base Sustainability Study Report (Travis SSR), released in April 2018, was a collaborative planning effort by Solano County and the cities of Fairfield, Suisun City, Vacaville, and Vallejo relating to land use regulation, conservation, and natural resource management issues affecting Travis AFB and local communities. Compatibility factors addressed in the Travis SSR include the growing population and pressure to develop land, the potential increase of alternative energy development in the vicinity, and the natural and biological resources that surround Travis AFB. Development policies in the General Plan also reflect recommendations made in the Travis SSR.

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Goal and Policies

The following goal and policies were developed based on community input and along with the land use diagram will be used to review ~~and update~~ proposals for new development in the Collinsville-Montezuma Hills Area ~~Plan~~.

Goal

SS.G-3: Protect and maintain the historic communities of Birds Landing and Collinsville while continuing to provide opportunities for industrial development that are compatible with the Collinsville area.

Policies

- SS.P-19: Support the continued commercial use of existing commercial parcels in Birds Landing.
- SS.P-20: Explore historic preservation for historic buildings located within the study area.
- SS.P-21: Preserve the residential character of the Collinsville town site; ensure that any future nonresidential uses are compatible with the residential character and that an adequate buffer is established between residential and nonresidential uses.
- SS.P-22: Preserve and enhance residential and commercial uses in Birds Landing.
- SS.P-23: Focus on renewable energy, other than wind energy, in the development of Water Dependent Industrial uses.
- SS.P-24: Provide adequate circulation for new industrial development in the Water Dependent Industrial land use designation, and protect circulation for adjacent, nonindustrial land uses, including agricultural and other local traffic.
- SS.P-25: Support the development of Commercial Recreation uses in designated portions of the Collinsville town site.
- SS.P-26: Maintain and support the expansion of neighborhood commercial uses appropriate for the traditional community in Birds Landing.
- SS.P-27: Protect existing historic communities from floodwaters by supporting the ongoing maintenance of levees and other flood control mechanisms.

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Regulations

~~SS.1-7 — Review and update the Collinsville-Montezuma Hills Area Plan and Program consistent with the Collinsville special study area land uses, policies and programs. The Area Plan policies and programs that apply to the secondary management area of the Suisun Marsh shall be reviewed and updated consistent with the Suisun Marsh Protection Plan.~~

~~Related Policies: — SS.P-19, SS.P-20, SS.P-21, SS.P-22, SS.P-23, SS.P-24, SS.P-25, SS.P-26, SS.P-~~

~~Agency/Department: — Department of Resource Management~~

~~Funding Source: General Fund, Project Applicants~~

~~Time Frame: 2011~~

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SS.I-13: ~~Continue to promote~~Promote the development of ~~renewable commercial grid-~~
level solar energy production and battery storage in the Collinsville area.

Renewable energy should be considered in the development of the Water Dependent Industrial area. Maintain an agricultural or marsh buffer between homes in Collinsville and any future industrial uses to mitigate visual impacts, glare, noise, and particulates.

Related Policy: SS.P-23

Agency/Department: Department of Resource Management

Funding Source: General Fund

Time Frame: Ongoing

Chapter 4

Page RS-4

Relationship to Other General Plan Chapters

State planning law requires general plans to be internally consistent, meaning that statements in one section are in agreement with all other portions of the plan. The Resources chapter contains goals, policies, and programs closely related to those contained in the Land Use, Agriculture, and Public Health and Safety chapters. However, this chapter differs by being almost exclusively oriented toward natural resources.

The Land Use chapter defines a planned land use pattern, identifying natural resource, agricultural, residential, commercial, industrial, and public use designations. Public and private lands intended for conservation, open space, and recreational purposes are identified on the Land Use diagram using the Water Bodies and Courses, Park and Recreation, Marsh, Watershed, Agriculture, and Public/Quasi-Public land use designations. The Land Use chapter and diagram also present ~~four-five~~ special purpose ~~designations-land use overlays~~ intended to further preservation of one or more resources, including a Vacaville-Fairfield-Solano Greenbelt Overlay to provide a permanent separation between the Vacaville and Fairfield urban areas, a Resource Conservation Overlay to conserve biological resources, an Agricultural Reserve Overlay to promote consolidation of agricultural conservation easements and mitigation lands, a Tri-City and County Cooperative Planning area to promote conservation of open space resources, and a ~~Wind Energy Resources Overlay to identify desired locations for wind energy facilities~~ Travis Reserve Area Overlay to maintain existing agricultural uses on lands that may be needed for the expansion of Travis Air Force Base or development of a civilian or joint-use airport.

The Agriculture chapter provides goals and policies to protect the County's farmland resources. Many similarities exist between the policies in the Resources chapter and the Agriculture chapter, including policies regarding urban-agricultural buffers created to reduce conflict

between adjacent land uses and community separators used to reinforce individual identity and physical separation of communities.

The Public Facilities and Services chapter addresses supply and use of resources and essential services, whereas the Resources chapter addresses their preservation and conservation. Water facilities and service and water resources and quality are closely linked. Policies in this chapter protect the water resources that are the foundation of a public water system. Energy resources and utilities are also closely related. The Resources chapter discusses energy resources within the county and various means of energy generation and conservation, whereas energy infrastructure and supply are discussed in the Public Facilities and Services chapter.

Pages RS-52 & 53

Wind energy converts the movement of wind to electricity through mechanical wind turbines. Wind electricity can be generated both on a small scale in agricultural and residential land and on a large scale through wind farms. Climatic conditions have blessed Solano County with excellent wind energy resources, and the county is one of five major utility-scale producers of wind energy in California.

While the county has extensive wind energy resources, numerous environmental concerns remain related to wind turbines. The biggest of these issues is-are the potential for wind turbines to interfere with the air traffic navigation radar used by Travis Air Force Base and the potential for bats and birds to be caught in the turbines and killed. A number of design improvements which have become standard practice have reduced ~~these-the~~ potential effects on bat and bird populations but the potential effects on air traffic navigation radar remain unresolved. In addition, newer turbine designs are much taller than older ones and these taller turbines can interfere with flight paths used by Travis Air Force Base even when the turbine structure does not intrude into navigable airspace.

~~The County has identified the Collinsville-Montezuma Hills south of Highway 12 as the primary wind resource area in the county. Noncommercial accessory wind turbine installations less than 100 feet in height and with a total rated power output of 100 kilowatts or less do not have a potential to cause significant environmental impacts or interfere with Travis Air Force Base, and are allowed with a building permit in any agricultural or natural resource zoning district. These types of installations are defined as less than 100 feet in height, with a total rated power output of 100 kilowatts or less. The guidelines and standards found within the General Plan implementation programs are directed at commercial, non-accessory wind turbine installations. Agricultural lands within the county are particularly appropriate for wind harvesting as turbines generally do not interfere with daily agricultural operations and can provide additional revenue on these properties.~~

~~Wind-Commercial wind energy development is and noncommercial wind turbine generators more than 100 feet in height are inappropriate in certain-most areas of the county, in order to protect public health and safety and natural resources. These areas are urban areas, the agricultural areas north of Highway 12, the Suisun Marsh Primary and Secondary Management AreaAreas, the Stebbins Cold Canyon Natural Area, San Pablo Bay National Wildlife Refuge, and the Jepson Prairie preserve owned by the Solano Land Trust. In addition, commercial wind energy development is inappropriate in areas where such development could materially interfere with the operation of air traffic navigation radar at Travis Air Force Base or the flight paths used by Travis aircraft.~~

~~Based on current radar technology and wind turbine materials, the method of siting wind turbines beyond the radar line-of-sight is the most proven and effective method for minimizing wind turbine impacts on a radar's aircraft detection capabilities. Siting wind turbines outside of the radar's line-of-sight is critical to mitigating additional cumulative effects arising from the addition of new turbines to those already existing within the current radar line-of-sight, as every additional turbine within the radar's line-of-sight negatively impacts the radar. However, radar technology and turbine designs are constantly improving, and better methods are being developed to model how new turbine installations could impact air traffic navigation radar.~~

~~In other areas of the county~~The County anticipates that the line-of-site method for evaluating potential impacts of wind turbines on radar operation will become outdated during the planning horizon of this General Plan, at which point proposals for commercial wind energy development will be processed under the normal use permit procedure. ~~Additional documentation may be required due to lack of existing data.~~ Wind ~~Under the use permit procedure, commercial wind~~ energy development, depending on size and location of the project, may require ~~both wind resource verification and~~ an environmental impact report to meet CEQA requirements. ~~The County incorporates by reference the most up-to-date mapping of wind resource areas available from the California Energy Commission, or subsequent agency, into the General Plan.~~ Applicants seeking permits for commercial wind turbine installations shall be required to demonstrate that the wind resource in their area is adequate using the mapping, wind studies and technology current to their permit application. Any future development of wind energy must be consistent with Airport Land Use Plans, the purposes for those plans as described in the State Aeronautics Act, and air operations of Travis Air Force Base and the Rio Vista Airport.

Pages RS-55 – 57

Policies

- RS.P-49: Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.
- RS.P-50: Provide incentives for city and county residents and businesses to produce and use renewable sources of energy.
- RS.P-51: Promote Solano County as a model for energy efficiency and green building.
- RS.P-52: Ensure adequate and affordable supplies of energy to meet the energy needs of the county.
- RS.P-53: Enable renewable energy sources to be produced from resources available in Solano County, such as solar, water, wind, and biofuels to reduce the reliance on energy resources from outside the county.

- RS.P-54: Reduce Solano County's reliance on fossil fuels for transportation and other energy-consuming activities.
- RS.P-55: Require responsible extraction, storage, and transportation of natural gas resources that minimize the impact on the natural environment.
- RS.P-56: Provide information, marketing, training, and education to support reduced energy consumption, the use of alternative and renewable energy sources, green building practices, recycling, and responsible purchasing.
- RS.P-57: Encourage the use of technology or siting to minimize adverse impacts from energy production facilities on the environment, including wildlife and agricultural resources.
- RS.P-58: Require the siting of energy facilities in a manner compatible with surrounding land uses, including Travis Air Force Base, and in a manner that will protect scenic resources.
- RS.P-58A: New commercial wind energy facilities and noncommercial wind turbines greater than 100 feet in height are inappropriate in areas north of Highway 12 and the Suisun Marsh Preservation Area.
- RS.P-58B: No wind turbine greater than 100 feet in height, measured at the apex of the blade at its highest point, shall be within a line-of-sight of the Travis AFB Digital Airport Surveillance Radar (DASR) Radar Installation. All commercial wind turbine facilities and non-commercial wind turbines greater than 100 feet in height shall provide an individual radar line-of-sight analysis to demonstrate that the placement of the proposed facility or wind turbine is not within a line-of-sight to the Travis DASR Radar Installation.
- RS.P-58C: Existing commercial and non-commercial wind turbines may be replaced only if the replacement turbine has dimensions and materials similar to the original. Replacement turbines that are significantly taller than the original, or built with materials that are significantly more reflective than the original, shall be subject to policy RS.P-58B.

RS.P-58D: Policies RS.P-58B and RS.P-58C implement the Airport Land Use Commission's 2015 Airport Land Use Plan for Travis Air Force Base. For that reason, these two policies will remain in effect through December 31, 2028, unless amended prior to then by the Board of Supervisors due to changes in wind turbine designs, radar technology, or radar impact modeling methods. After December 31, 2028, policy RS.P-58E shall become effective.

RS.P-58E: An applicant proposing installation or replacement of a wind turbine generator greater than 100 feet in height shall model anticipated impacts to verify that there will be no net increase in radar interference above baseline to Travis Air Force Base, using a modeling methodology of proven reliability. The applicant must demonstrate that the project will cause no measurable decrease in the ability of the Travis Air Force Base air navigation radar to detect targets. In addition, the applicant must demonstrate that the project will not negatively impact existing or anticipated flight operations of Travis Air Force Base.

RS.P-59: Encourage on-site renewable energy production and use and energy conservation measures.

Implementation Programs

Regulations

RS.I-37: Amend and maintain the zoning ordinance to guide the siting or repowering of commercial, ~~non-accessory~~ wind turbine installations and noncommercial wind turbines greater than 100 feet in height, consistent with the limitations described in policies RS.P-58A through RS.P-58C. Include the following standards into the ordinance:

- Require a minimum setback of 1,000 feet or three times total turbine height, whichever is greater, from a dwelling unit, residential building site, or land zoned for residential uses.
- Require a minimum setback of three times total turbine height from any zoning district (other than residential) which does not allow wind turbines.

- Require a minimum setback of three times total turbine height from any property line, public roadway, transmission facility, or railroad. This minimum setback may be waived in the case of wind farms located on adjacent parcels, provided an agreement has been reached between the neighboring property owners.
- Require a setback of 1/4 mile from the right-of-way of any scenic roadway.
- In the Cordelia Hills, wind energy development shall be set back to those areas which are beyond the sight of existing residential neighborhoods and areas planned for residential development, and set back to areas beyond view from I-80 and I-680. No turbine shall be sited within this zone.
- ~~Define noncommercial wind energy generators as “wind driven machines” that convert wind energy into production of electrical power for the primary purpose of on site use and not for resale, that are 100 feet or less in height, and that have a total rated power output of 100 kilowatts or less.~~
- Require that Travis Air Force Base be notified of any permit application for commercial wind energy development or a noncommercial wind turbine more than 100 feet in height.
- Require applicants to demonstrate that the project will not cause material adverse impacts to radar operations at Travis Air Force Base or to flight paths used by Travis Air Force Base.
- Establish a procedure for plan check and testing of wind electric generators prior to use permit or building permit approval. Certification of all detailed plans for electrical systems, electrical substations, support towers, and foundations by California licensed professional engineers shall be required. Performance testing of wind turbine generators shall be required to ensure against catastrophic failure.
- Include commercial wind turbine development as a permitted use in the following zone districts:

Exclusive Agricultural (A)

~~Limited Agricultural (A-L)~~

Water-Dependent Industrial (I-WD)

Limited Manufacturing (M-L)

General Manufacturing (M-G)

Watershed and Conservation (W)

- Non-commercial wind energy development shall be allowed in districts as currently provided for in the ordinance.

Related Policies: RS.P-22, RS.P-37, RS.P-58 – RS.P-58E

Agency/Department: Department of Resource Management

Funding Source: General Fund

Time Frame: By 2011-2024

Pages RS-61 – 64

RS.I-50: During review of wind turbine generator proposals, consider the following:

- Wind turbine generators shall not be located in areas that conflict with the mission of Travis Air Force Base or other air operation facilities.
- Commercial turbines and non-commercial turbines over 100 feet in height or with a total rated power output of more than 100 kilowatts ~~in-designated wind resource areas~~ require a public hearing and use permit approval by the Planning Commission.
- Following use permit approval, building permits and grading permits are required. Noncommercial turbines 100 feet or less in height and 100 kilowatts or less in rated power output require only building permits and grading permits.
- Submittal requirements for use permit applications ~~within the wind resource areas~~ include the following:
 - Permit application
 - Project description form (requires information on size and characteristics of project, physical and performance specifications of

equipment, transmission system, certification, project schedule and phasing, circulation, and access).

- Acoustical analysis
- Archaeological survey
- Radar Impact analysis, if wind turbine generators greater than 100 feet in height will be within line-of-sight of the air traffic navigation radar at Travis Air Force Base.
- Geotechnical report (must correlate to standard county requirements for geotechnical analysis)
- Site plan
- Elevation package (elevation drawings to scale of proposed turbines and accessory uses).
- Notification of the Federal Aviation Administration of any application with wind turbines over 200 feet in height ~~within 20,000 feet of a runway of any airport.~~
- Notification of the utility and the California Public Utilities Commission of application filing.
- Notification of application filing to microwave communications link owners within 2 miles of the proposed installation.
- Adjacent property owner's notification package.
- Current aerial photographs or panoramic photographs of the site.
- Evidence of liability and workers compensation insurance.
- Map locating all residences within 2 miles of the proposed project.
- Certification of detailed plans for electrical systems and transmission lines, substation, support towers, generators, and foundations by California licensed professional engineers (electrical, civil, and structural).
- Performance test documentation by a licensed engineer for all proposed turbine types.

- Contribution to escrow account for removal of inoperable or unsafe wind equipment and associated uses, including foundations.
- Following review of the applicant's site plan by county planning staff, a biological assessment would be required if it is determined that sensitive biological resources identified by the Resource Conservation Overlay (Figure RS-2) could be affected by the proposed project. If the proposed wind turbine siting would fall within or near areas of sensitivity, additional biological assessment of the probable impacts of the project would be required as part of the permit application. Findings of the biological assessment would determine need for biological resource monitoring and mitigation for protection of biological resources. For projects proposed in areas of low biological sensitivity, no additional biological information would be required.
- Submittal requirements for building permit and grading permit applications shall be as follows:
 - Completed permit application.
 - Detailed plans and specifications for structures, foundations, electrical systems, certified by a California licensed professional engineer. Plans will be checked for compliance with such codes as the Uniform Building Code, the National Electrical Code, and applicable ANSI and IEEE standards.
 - Grading and erosion, sediment, and runoff control plans.
- ~~A standard set of minimum conditions would apply to every permit approval. These conditions could be modified or added to at the discretion of Resource Management Department staff, Planning commission, or Board of Supervisors.~~
- ~~Additional environmental information beyond that required for permit processing would not be required for projects proposed within the wind resource areas.~~

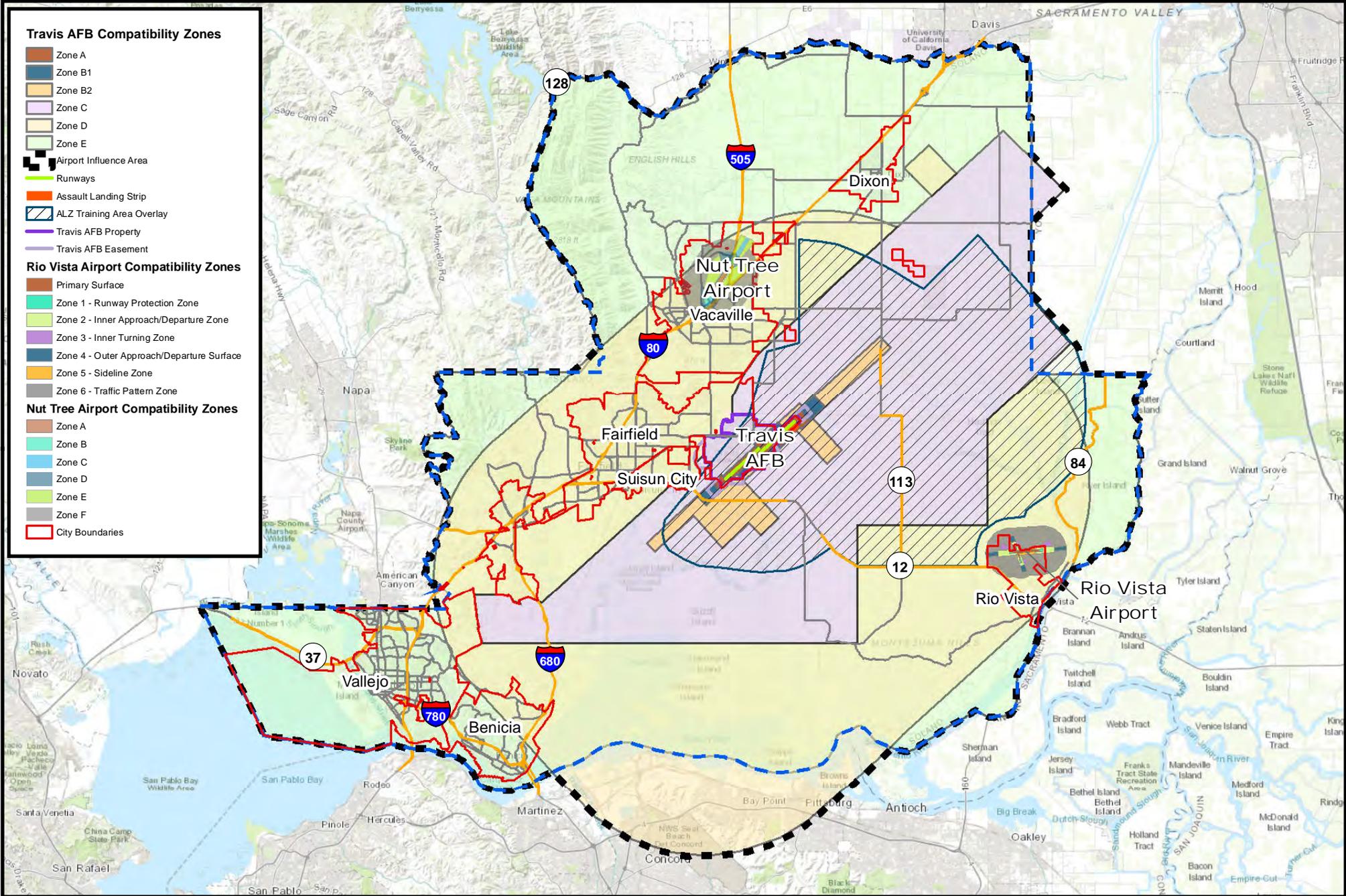
- In addition to the required safety setbacks, applicants would be required to demonstrate that the CNEL 50 influence area of proposed wind turbines would not coincide with residential areas or individual dwelling units. No turbines which exhibit high infrasonic noise generation potential would be permitted within one mile of residential uses or land zoned for residential uses.
- The zoning ordinance should require a bond or other guarantee, such as a contribution to an escrow account, for removal of inoperable or unsafe wind equipment and associated uses, including foundations, after use permit approval.

Related Policies: RS.P-22, RS.P-50, RS.P-52, RS.P-53, RS.P-54, RS.P-56,RS.P-57, RS.P-58 RS.P-58E

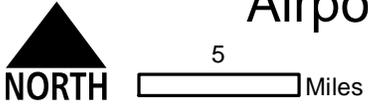
Agency/Department: Department Resource Management

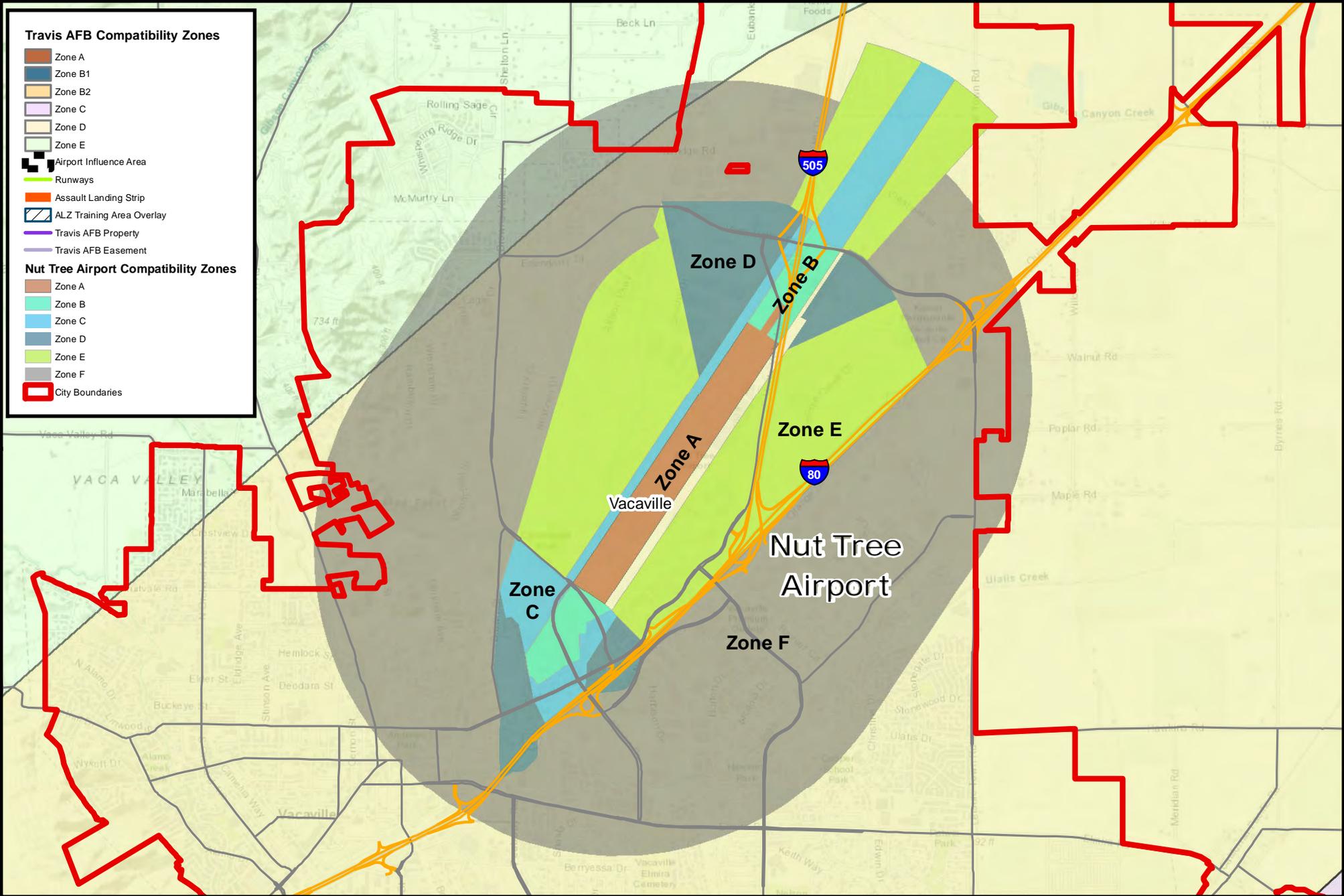
Funding Source: General Fund

Time Frame: Ongoing

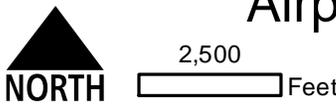


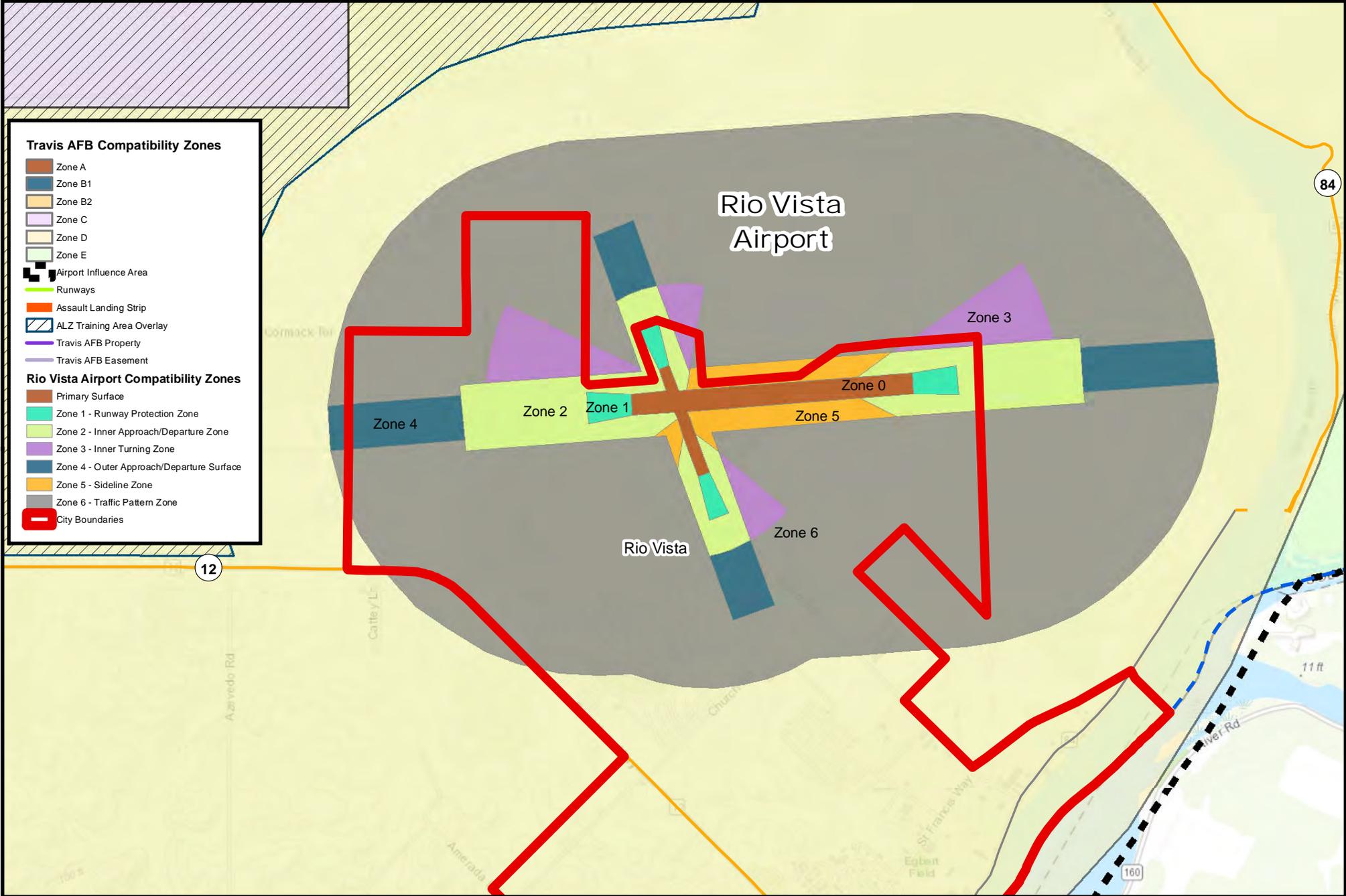
Airport Compatibility Zones & and Travis AFB Influence Area





Airport Compatibility Zones & and Travis AFB Influence Area





Airport Compatibility Zones & and Travis AFB Influence Area

