

# EUGENE CITY COUNCIL

## AGENDA ITEM SUMMARY



---

Action: An Ordinance Adopting an Updated Eugene Airport Master Plan, a Refinement Plan of the Eugene-Springfield Metropolitan Area General Plan (Metro Plan); Adopting a Severability Clause; and Providing an Effective Date (City File RA 10-1, Lane County File PA 10-5284)

---

Meeting Date: September 27, 2010  
Department: Planning and Development  
*www.eugene-or.gov*

Agenda Item Number: 5  
Staff Contact: Gabe Flock  
Contact Telephone Number: 541/682-5697

---

### ISSUE STATEMENT

The City Council is scheduled to take action on an ordinance adopting the updated Eugene Airport Master Plan, as a refinement to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). Separate deliberation and action by the Lane County Board of Commissioners is scheduled for the following day, September 28, 2010.

### BACKGROUND

The current update to the Eugene Airport Master Plan replaces earlier versions as a refinement to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). This plan provides guidance regarding specific airport functions including commercial aviation, general aviation, and airport-related commercial and industrial services associated with the airport. This update which is required by the Federal Aviation Administration will serve as a development guide for the airport to meet aviation demand through the planning horizon of 2026. It provides guidance related to possible airport facility improvements, financial and business planning, land use and project coordination. Unlike the adoption process for the 1999 Airport Master Plan, the current update does not include or require any amendments to the Metro Plan or other locally adopted plans such as TransPlan. No changes to existing land use designations, zoning, or adopted policy are proposed.

The Eugene City Council and Lane County Board of Commissioners held a joint public hearing on September 14, 2010, to consider the proposed update to the Eugene Airport Master Plan. No public testimony was received. However, the record was left open to allow revisions to the findings for Statewide Planning Goal 13 regarding Energy Conservation, and for staff response to questions that were raised by councilors and commissioners following the hearing. The revised findings are attached for reference, and a staff response to additional questions that were raised will be provided under separate cover. The ordinance and revised findings supporting approval are attached, as well as an executive summary of the updated master plan, for ease of reference.

A complete copy of the updated Eugene Airport Master Plan, which is the subject of this action, remains available on the City's website for the Eugene Airport at: [www.eugene-or.gov](http://www.eugene-or.gov) (on the Eugene Airport home page, scroll down and click on "Draft Master Plan Update" along the left-hand column).

Councilors and commissioners have already received a copy of the master plan on disk. The full master plan document will be included as a formal exhibit to the proposed ordinance.

Otherwise, a full set of record materials, including a color hardcopy of the updated Eugene Airport Master Plan remains available in the City Council office for reference.

### **RELATED CITY POLICIES**

Eugene Code requires that the adoption of a refinement plan update be consistent with the Metro Plan and Statewide Planning Goals. Consistency with the Metro Plan and Statewide Planning Goals is addressed in the supporting findings which are attached as an exhibit to the implementing ordinance.

### **COUNCIL OPTIONS**

The City Council may consider the following options:

1. Approve the ordinance.
2. Approve the ordinance with specific modifications as determined by the City Council.
3. Deny the ordinance.

### **CITY MANAGER'S RECOMMENDATION**

The City Manager recommends that the City Council close the public record and approve the ordinance. The Lane County Board of Commissioners is scheduled for separate deliberation and action the following day, on September 28, 2010.

### **SUGGESTED MOTION**

Move to close the record and approve the ordinance adopting the updated Eugene Airport Master Plan, as a refinement to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan).

### **ATTACHMENTS**

- A. Draft City Ordinance and Revised Findings
- B. Executive Summary of Eugene Airport Master Plan Update
- C. Vicinity Map

### **FOR MORE INFORMATION**

Staff Contact: Gabe Flock, Senior Planner  
Telephone: 541/682-5697  
Staff E-Mail: gabriel.flock@ci.eugene.or.us

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE ADOPTING AN UPDATED EUGENE AIRPORT MASTER PLAN, A REFINEMENT PLAN OF THE EUGENE-SPRINGFIELD METROPOLITAN AREA GENERAL PLAN (METRO PLAN); ADOPTING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

THE CITY OF EUGENE DOES ORDAIN AS FOLLOWS:

**Section 1.** The Eugene Airport Master Plan set forth in Exhibit A attached hereto and incorporated herein, is hereby adopted to supersede and replace the provisions of the Eugene Airport Master Plan adopted as a refinement plan to the Transportation Element of the Metro Plan by Ordinance No. 19730.

**Section 2.** Although not part of this Ordinance, the City Council adopts the findings set forth in the attached Exhibit B in support of this action.

**Section 3.** If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions hereof.

**Section 4.** Notwithstanding the provisions of the Eugene Charter of 2002, this Ordinance shall not become effective until the Lane County Board of Commissioners has taken action identical to the action taken by the City of Eugene in Section 1 of this ordinance.

Passed by the City Council this  
\_\_\_\_\_ day of \_\_\_\_\_, 2010

Approved by the Mayor this  
\_\_\_\_\_ day of \_\_\_\_\_, 2010

\_\_\_\_\_  
City Recorder

\_\_\_\_\_  
Mayor

## EXHIBIT B

### FINDINGS IN SUPPORT OF THE ADOPTION OF AN UPDATE TO THE EUGENE AIRPORT MASTER PLAN (RA 10-2 AND PA 10-5284)

#### Introduction

The original Mahlon Sweet Field Master Plan was initially prepared for the airport in 1979 and adopted by the City in 1980. A major update of the Eugene Airport Master Plan was then adopted in 1990, by Lane County and the City of Eugene, to replace the Mahlon Sweet Field Master Plan. The 1990 Airport Master Plan was developed to respond to problems with runway length and capacity, and to assure continued improvements to air service that would meet the needs of Eugene, Lane County and the surrounding areas served by the airport. The 1990 master plan developed the initial concept for re-configuring the airfield into a parallel runway design which has since been implemented.

Subsequently, the 1999 Airport Master Plan update was adopted in 2000, to replace the 1990 master plan. It assured that aviation needs within the Airport's service area would continue to be met by providing projections for facility demands and financial resources, and included a variety of recommendations for facility renovation and development. Actions related to the 1999 update included land use designation changes and rezoning to accommodate expansion of airport uses, development of a new parallel runway, realignment of Greenhill Road, and a variety of other airport improvements such as upgrades to the passenger terminal building and parking area expansion.

The current update to the Eugene Airport Master Plan replaces earlier versions as a refinement to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). The purpose of this plan is to provide guidance regarding specific airport functions including commercial aviation, general aviation, and airport-related commercial and industrial services associated with the airport. As stated in the plan goals and objectives, the current master plan update focuses heavily on the refinement of "landside" components (such as future development of airport-supporting commercial services) and ways to make the airport more financially self-reliant, but also includes improvements within the existing airport boundary to accommodate the Eugene Airport's projected aviation demands. This update uses 2006 as the base year for data and analytical purposes and serves as a development guide through the planning horizon of 2026.

Unlike the adoption process for the 1999 Airport Master Plan, the current update does not include any amendments to the Metro Plan or other locally adopted plans such as the Eugene-Springfield Transportation System Plan (Transplan). No changes to existing land use designations, zoning, or adopted policy are proposed. The current update does include recommendations for a variety of airport improvements that will accommodate the Airport's needs into the future, some of which will require further research and analysis to determine the need and timing for any future Metro Plan amendments or zone changes in the vicinity. Those recommendations are further addressed in the findings below and it is emphasized that any specific Metro Plan amendments or zone changes necessary to implement the recommendations of the Eugene Airport Master Plan will



require additional public process and formal adoption by the affected jurisdiction(s) in the future.

As addressed in the findings below, the current update of the Eugene Airport Master Plan is consistent with the process and regulations established for airport planning and administered by the Federal Aviation Administration (FAA) and the Oregon Department of Aviation (ODA). The master plan update follows the process set forth in FAA Advisory Circular 150-5070-6B, Airport Master Plans, and complies with the State’s airport planning regulations including applicable Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OARs). The findings below further demonstrate that adoption of the Eugene Airport Master Plan update is consistent with the applicable local approval criteria for adoption as a refinement to the Metro Plan.

The need for joint City and County adoption of the updated master plan stems from the location of the Eugene Airport outside the City’s urban growth boundary (UGB), but within the Metro Plan boundary. As a matter of Metro Plan policy, the airport is located outside the UGB to protect aviation functions from incompatible development, as well as to reduce airport-related impacts on development within the UGB. Due to this location, land use regulations for the airport property are under Lane County jurisdiction, and adoption of the refinement plan for this City-owned facility necessarily includes both governing bodies. The joint adoption is also appropriate as the updated Eugene Airport Master Plan will replace the existing plan, which was also adopted jointly.

### **Approval Criteria and Evaluation**

Eugene Code (EC) 9.8424 requires that the following criteria (in **bold**) must be met for adoption of the updated Eugene Airport Master Plan, as a refinement to the Metro Plan:

- (1) The refinement plan amendment is consistent with all of the following:**
  - (a) Statewide Planning Goals;**
  - (b) Applicable provisions of the Metro Plan;**
  - (c) Remaining portions of the refinement plan.**
  
- (2) The refinement plan amendment addresses one or more of the following:**
  - (a) An error in the publication of the refinement plan.**
  - (b) New inventory material which relates to a statewide planning goal.**
  - (c) New or amended community policies.**
  - (d) New or amended provisions in federal law or regulation, state statute, state regulation, statewide planning goal, or state agency land use plan.**
  - (e) A change in circumstances in a substantial manner that was not anticipated at the time the refinement plan was adopted.**

Lane Code (LC) criteria at LC 12.060, for approval of a refinement plan amendment, are also included below:

**The Refinement Plan amendment must be consistent with the relevant statewide planning goals adopted by the Land Conservation and Development Commission and the Metro Plan.**

The findings below address consistency with the applicable approval criteria in support of

adoption.

**Statewide Planning Goals -- EC 9.8424(1)(a) and LC 12.060**

**Goal 1 - Citizen Involvement: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.**

The City of Eugene and Lane County have acknowledged provisions for citizen involvement that ensure the opportunity for citizens to be involved in all phases of the planning process and set out requirements for such involvement. Adoption of this update to the Eugene Airport Master Plan, as a refinement of the Metro Plan, does not amend the citizen involvement program of either jurisdiction. The process for reviewing this refinement plan update complies with Goal 1 since it complies with, and surpasses the requirements of, the citizen involvement provisions.

Beyond the locally required public notice and hearings which are described below, an Airport Master Plan Advisory Committee was established to assist with the development of the master plan update, including representatives from a broad cross-section of the community being served by the Eugene Airport. The 16-member committee met six times over the course of approximately 2½ years between 2006 and 2009, to review and provide input on the master plan as it was developed. In addition, four public participation workshops were held during the course of developing the master plan update.

The City of Eugene and Lane County implement Statewide Planning Goal 1 by requiring that notice of the proposed adoption be given and public hearings be held prior to adoption. Consideration of the proposed adoption began with a joint public hearing by the Eugene and Lane County Planning Commissions. The joint Planning Commission public hearing on the proposed adoption was duly noticed to the City of Springfield, Lane County, community groups and individuals who have requested notice. The City also mailed notice of the proposed refinement plan update to the Department of Land Conservation and Development, in accordance with State statutes. Notice and opportunity to comment was also provided to the Oregon Department of Transportation (ODOT), all neighborhood groups officially recognized by the City, and other interested parties including members of the Eugene Airport Master Plan Advisory Committee. In addition, notice of the public hearing was published in the Register Guard newspaper. The Eugene City Council and Lane County Board of Commissioners also held a duly noticed public hearing to consider adoption of the Eugene Airport Master Plan, prior to final action by each local jurisdiction.

These notice requirements and public hearing processes, in addition to the work of the Airport Master Plan Advisory Committee, have afforded ample opportunity for public input and involvement consistent with the State's citizen involvement provisions required by Goal 1.

**Goal 2 - Land Use Planning: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.**

Under Goal 2, the Metro Plan serves as the area's comprehensive, policy framework plan. The current update to the Eugene Airport Master Plan replaces earlier versions as a refinement to the

Eugene-Springfield Metropolitan Area General Plan (Metro Plan), and is found to be consistent with the policy framework already established by the Metro Plan, and related adopted plans including Transplan. As required by the approval criteria for adoption of this refinement plan update, findings regarding consistency with the relevant provisions of the Metro Plan are provided later in this evaluation. The proposed update also follows applicable procedures for coordinated adoption by the local governing bodies including the City of Eugene and Lane County.

In addition to its status as a component of the overall comprehensive planning framework, the master plan update is also required to meet FAA requirements for aviation planning and remain eligible for FAA funding for needed Airport improvements. As in the past, the current master plan update was developed consistent with the FAA guidelines for Airport master plans and also accounts for numerous aviation standards relating to airport operations safety, noise and compatibility with surrounding land uses contained in applicable FAA Federal Aviation Regulations. The current update is also consistent with state airport-related objectives outlined in the Oregon Aviation Plan and promulgated through the state's adopted Aviation System Plan (ASP) and related statutes and administrative rules.

ORS 836.610, Airports and Landing Fields, requires that local comprehensive plans and land use regulations accommodate airport zones and uses for certain publicly owned and privately owned public use airports. Pursuant to OAR 738-090-0030, the Eugene Airport (a.k.a. Mahlon Sweet Field) is listed as one of the publicly owned airports registered, licensed, or otherwise recognized by the Oregon Department of Transportation (ODOT) and Oregon Aviation Department (ODA). For airports so listed, ORS 836.610 requires that comprehensive plans be consistent with the provisions in ORS 836.616, which establish rules for airport uses and activities, and ORS 836.619, relating to state rules establishing safety and compatibility standards of land uses near airports.

The Airport Planning Rules contained in OAR 660, Division 13 implement ORS 836.600 through 836.630 and Statewide Planning Goal 12, Transportation. These rules establish parameters for airport planning to support the vitality and economic function of airports and their host communities. As stated in OAR 660-013-0010(1):

The policy of the State of Oregon is to encourage and support the continued operation and vitality of Oregon's airports. These rules are intended to promote a convenient and economic system of airports in the state and for land use planning to reduce risks to aircraft operations and nearby land uses.

OAR 660-013-0030 requires that local plans for airport operations and development be consistent with the state's adopted ASP. The current master plan update serves as the local aviation plan consistent with the ASP, under the requirements of ORS 836.600 through 836.630 and applicable OARs. Beyond consistency with these statutory requirements, the current update complies with applicable FAA regulations as described in the master plan update.

Under the state's Transportation Planning Rule, OAR 660-012-0065(1) and (3)(n) permit expansions or alterations of public use airports on rural lands when such improvements do not permit service to a larger class of airplanes, and preclude the need to take an exception to Statewide Planning Goals under the standards outlined in Goal 2. The current master plan update

does not include any improvements are proposed that would permit service by a larger class of airplanes and no goal exceptions are required. Conformance with the state's Transportation Planning Rule will be further addressed below as part of the findings relative to Goal 12.

Further, as noted elsewhere in this evaluation, adoption of the current master plan update as a refinement to the Metro Plan remains consistent with, and does not include any additional plan amendments to the Metro Plan or other locally adopted plans such as Transplan. The following policy language from the Metro Plan Transportation Element (Policy F.30, Page III-F-12), is particularly relevant under Goal 2:

Support public investment in the Eugene Airport as a regional facility and provide land use controls that limit incompatible development within the airport environs. Continue to use the Eugene Airport Master Plan as the guide for improvements of facilities and services at the airport.

The current update does include recommendations for a variety of airport improvements that will accommodate the Airport's needs into the future, some of which will require further research and analysis to determine the need and timing for any future Metro Plan amendments or zone changes in the vicinity. Those recommendations are further addressed in the findings below and it is emphasized that any specific Metro Plan amendments or zone changes necessary to implement the recommendations of the Eugene Airport Master Plan will require additional public process and formal adoption by the affected jurisdiction(s) in the future.

As such, the current master plan update is consistent with Goal 2 as it relates to updating a refinement to the Metro Plan and does not create internal inconsistencies with the Metro Plan.

### **Goal 3 - Agricultural Land: To preserve and maintain agricultural lands.**

The prior 1999 Airport Master Plan adoption included Metro Plan amendments to re-designate parcels from Agricultural use on the Metro Plan diagram to Government and Education and to Airport Reserve. At that time, analysis required by Goal 3 was provided for the affected parcels which were re-designated to accommodate airport use and no Goal exception was required pursuant to OAR 660-012-0065(1) and (3)(n).

Adoption of the current master plan update does not include any changes to existing Agricultural land use designations in the surrounding area, and OAR 660-012-0065(1) and (3)(n) allow airport improvements contemplated in the master plan update without the need for a Goal exception.

The current master plan update does consider impacts related to noise from airport operations and possible impacts from surrounding land uses on aviation safety. Existing and proposed airport improvements are compatible with agricultural uses per standards set forth in OAR 660-013-0040, et seq; ODOT's Oregon Airport Land Use Compatibility Guidelines; and relevant Metro Plan policies and local ordinances.

As such, adoption of the current master plan update is consistent with Goal 3 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 4 - Forest Land: To conserve forest lands.**

There are no parcels within the airport boundary or surrounding area currently designated as Forest Land. Also, as found during the prior 1999 Airport Master Plan process, even if forest resources were feasible in the subject area, such uses could be considered incompatible with airport operations given height restrictions and air safety standards.

Adoption of the current master plan update does not include any changes to existing Forest Land use designations, and OAR 660-012-0065(1) and (3)(n) allow airport improvements contemplated in the master plan update without the need for an exception to Goal 4.

As such, adoption of the current master plan update is consistent with Goal 4 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources: To conserve open space and protect natural and scenic resources.**

Adoption of the current Eugene Airport Master Plan update does not include any plan amendments that would affect Goal 5 resources. The following administrative rule (OAR 660-023-0250) is applicable to post-acknowledgement plan amendments concerning Goal 5:

- (3) Local governments are not required to apply Goal 5 in consideration of a PAPA unless the PAPA affects a Goal 5 resource. For purposes of this section, a PAPA would affect a Goal 5 resource only if:
  - (a) The PAPA creates or amends a resource list or a portion of an acknowledged plan or land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5;
  - (b) The PAPA allows new uses that could be conflicting uses with a particular significant Goal 5 resource site on an acknowledged resource list; or
  - (c) The PAPA amends an acknowledged UGB and factual information is submitted demonstrating that a resource site, or the impact areas of such a site, is included in the amended UGB area.

Adoption of the Eugene Airport Master Plan update as a refinement to the Metro Plan will not create or amend a list of Goal 5 resources, a plan or a land use regulation adopted in order to protect a significant Goal 5 resource or to address specific requirements of Goal 5. Adoption of the master plan update will not allow any new conflicting uses or amend the acknowledged Urban Growth Boundary. Therefore, adoption does not trigger the need to consider Goal 5 pursuant to OAR 660-023-0250(3).

The only Lane County Goal 5 waterway identified in the vicinity traverses the boundary of the site near its southwest corner and is not impacted by any of the recommendations in the master plan update. To the extent that construction of future airport improvements contemplated in the master plan update may impact other jurisdictional wetlands in the area, as discussed in Chapter 3, Alternative Plan Concepts, avoidance and minimization alternatives have been considered. Some of the wetland areas considered in alternative development scenarios for the airport have

already been filled and mitigated through past permitting. Prior to any development in areas not already delineated or filled, further wetlands analysis and delineation will be required. If wetlands are in fact present, then state and federal wetlands regulations and permitting processes will need to be satisfied before construction, in addition to any related County requirements.

As such, adoption of the current master plan update is consistent with Goal 5 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 6 - Air, Water and Land Resources Quality: To maintain and improve the quality of the air, water, and land resources of the state.**

Goal 6 addresses waste and process discharges from development, and is aimed at protecting air, water and land from impacts from those discharges. The proposed refinement plan update does not amend the metropolitan area's air, water quality or land resource policies. Future development recommended in the updated master plan will be required to comply with all local, state, and federal regulations regarding land, air, and water discharges and emissions. To the extent that any of the future airport improvements within the updated master plan may create additional impacts to air, water or land resources, state and local permitting processes will ensure that discharges do not exceed allowable standards.

The updated Eugene Airport Master Plan otherwise demonstrates that future development can be reasonably expected to comply with applicable environmental laws. As such, adoption of the current master plan update is consistent with Goal 6 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 7 - Areas Subject to Natural Disasters and Hazards: To protect life and property from natural disasters and hazards.**

Goal 7 requires that local government planning programs include provisions to protect people and property from natural hazards such as floods, landslides, earthquakes and related hazards, tsunamis and wildfires. The updated Eugene Airport Master Plan is consistent with Goal 7 because the only identified potential natural hazards are areas within the 100-year floodplain located inside the airport boundary, and future development proposed must comply with local, state, and federal regulations pertaining to building and construction relative to floodplain areas.

Limited areas within the airport boundary are in the 100-year floodplain (Zone A). These areas are associated with drainages carrying runoff to the Clear Lake Channel and Amazon Canal system at the periphery of the airport within runway protection zones and other areas not scheduled for immediate development and currently have no operational impacts. If future development were to impact any areas within the 100-year floodplain, it would be subject to applicable regulatory standards and local permitting requirements for floodplain development to ensure life and property is adequately protected.

The airport is too far from the ocean and significant landforms to be subject to natural disasters or hazards such as landslides or tsunamis. Although much of western Oregon is subject to potential earthquake hazards, detailed fault locations have not been mapped for the subject area. Future

construction recommended in the updated master plan will be subject to current earthquake standards contained in allocable building codes and will therefore pose minimal risk associated with potential earthquakes. Other potential hazards, such as severe winter storms and wildfires can also be mitigated at the time of development based on accepted building codes and building techniques.

As such, adoption of the current master plan update is consistent with Goal 7 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 8 - Recreational Needs: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.**

The updated Eugene Airport Master Plan is consistent with Goal 8 because there are no public parks and no land within or near the Eugene airport boundary that are zoned or designated for park use. The nearest public park, Golden Gardens Park, is located approximately 2.1 miles from the airport (driving distance to the park is 3.2 miles). The nearest developed public park is Lane County's Orchard Point Park, located at the northeast edge of Fern Ridge Reservoir, approximately 5.5 miles west of the airport. None of the proposed development at the airport for the 20-year planning period requires the use or acquisition of publicly owned park or recreation area.

As such, adoption of the current master plan update is consistent with Goal 8 and will not otherwise affect Metro Plan compliance with this Goal.

**Goal 9 - Economic Development: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.**

Statewide Planning Goal 9 calls for the provision of "adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens." The current update of the Eugene Airport Master Plan is consistent with Goal 9 because proposed improvements will continue to enhance the viability of the Eugene Airport which supports the area's economic vitality as Oregon's second largest airport. It is identified in the state's adopted Aviation System Plan (ASP) as a Level 1 commercial service airport, the most significant type within the state's system of public airports. The improvements proposed in the current master plan update will assure that necessary facilities will be available to support airport functions through 2026, and consequently the area's economic development needs.

These economic development needs are identified in two functional refinements to the Metro Plan, the Metropolitan Industrial Lands Special Study and the Eugene Commercial Lands Study. The studies provide the currently adopted inventories and policy recommendations relative to the economic development aspects of industrial and commercial lands within the Eugene UGB, consistent with Goal 9 and related ORS and OAR requirements. Neither study identified land within the airport boundary for inclusion in the metro area's inventory of industrially or commercially designated lands. This is because both studies focused on sites within the UGB and the fact that the Government and Education designation allows for limited airport related industrial and commercial development as a matter of Metro Plan policy. Since adoption of the

master plan update does not include any land within the UGB, nor any change to existing land use designations (particularly no conversion of industrial or commercial use to another designation), no additional analysis is required under the implementing provisions of OAR 660-009-0010.

The current Eugene Airport Master Plan update is otherwise consistent with state policy governing local government airport regulations. ORS 836.600 states:

In recognition of the importance of the network of airports to the economy of the state and the safety and recreation of its citizens, the policy of the State of Oregon is to encourage and support the continued operation and vitality of Oregon's airports. Such encouragement and support extends to all commercial and recreational uses and activities described in ORS 836.616(2).

Because the Metro Plan, the ASP, and state policy acknowledge the airport's role in meeting the area's economic development objectives, the current master plan update is consistent with Goal 9, and approval will not affect Metro Plan compliance with this Goal.

**Goal 10 - Housing: To provide for the housing needs of the citizens of the state.**

Goal 10 requires that communities plan for and maintain an inventory of buildable residential land for needed housing units. The administrative rule for Statewide Planning Goal 10 (OAR 660 Division 8) states that "the mix and density of needed housing is determined in the housing needs projection. Sufficient buildable land shall be designated on the comprehensive plan map to satisfy housing needs by type and density range as determined in the housing needs projection. The local buildable lands inventory must document the amount of buildable land in each residential plan designation." The comprehensive plan map for the City is the Metro Plan land use diagram. The 1999 Eugene-Springfield Metropolitan Area Residential Lands and Housing Study (RLS) is acknowledged for compliance with the requirements of Goal 10 and its administrative rule.

The subject property was not included in the adopted RLS supply analysis, and the current Eugene Airport Master Plan update is consistent with Goal 10 because it does not change the status or designation of any land currently designated for residential use. Nonetheless, it is notable that the master plan update thoroughly considers two operational issues that relate to the compatibility of nearby housing or residential uses and the airport: safety and noise.

The FAA establishes safety rules regarding airspace safety within airport environs through Federal Aviation Regulation (FAR) Part 77. Part 77 establishes safety zones around runways to preclude the location of structures or other land uses that would create obstructions or pose undue hazards to air navigation. The two- and three-dimensional "imaginary surfaces" created in Part 77 are codified through requirements outlined in OAR 738-0070 and local codes (Lane Code and Eugene Code). Additional runway protection zones at and near the ends of runways are defined by the FAA relative to airport design criteria to assure safe and efficient airport operations.

These imaginary surfaces and runway protection zones are described and depicted in the master plan update. In the event of any extension of runway protection zones or changes to protected airspace as described in Chapter 6 of the master plan update, additional analysis is necessary to



determine the extent of any needed changes to local zoning and plan designations. Future property acquisition and land use designation changes may also be necessary to accommodate extended runway protection zones in the future. The master plan update recommends a detailed analysis of existing land use protection measures and what changes may be needed to accommodate future airport improvements, prior to implementation.

Another compatibility issue between the airport and residential development pertains to noise impacts. FAA regulations define acceptable noise exposure contours as measured in yearly day-night average sound levels (DNL). The FAA and other federal agencies establish 65 DNL as the threshold considered as a significant noise impact. Through OAR 340-035-0045, the State Department of Environmental Quality (DEQ) regards DNL between 60 and 55 as significant. DEQ establishes 55 DNL as a threshold for study of planning and zoning measures to limit noise exposure and recommends specific mitigation when noise impacts are greater than 65 DNL.

As depicted and described in Chapter 6 of the Plan Update, there is a significant decrease in the amount of single family housing parcels within the 55 DNL contour in 2026, with 117 less affected parcels than in 2006. Within the 65 DNL contour for 2006, there are four single family home parcels and one mobile home parcel. This number decreases to three home parcels in 2026. The reduction in the size of noise contours is primarily due to a change in military aircraft that will operate at the airport.

As such, adoption of the current master plan update is consistent with Goal 10 and will not affect Metro Plan compliance with the provision of needed housing pursuant to Goal 10.

**Goal 11 - Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.**

The Eugene Airport is currently served by the full range of urban services through previous exceptions allowing such services to be extended to the airport outside of the UGB and as provided for in the Metro Plan Public Facilities and Services Element (Policy G.26, Page III-G-12). Findings in the Metro Plan also confirm that the area of the airport designated Government and Education on the Metro Plan diagram receives municipal water, wastewater, fire and police services. Proposed improvements in this area would therefore be served by extension of currently available key urban services.

The City of Eugene provides wastewater sewer facilities to the airport as well as police and fire protection. The City's Airport Rescue and Firefighting station is supplemented by response as necessary from the Lane Rural Fire Protection District. Other services are provided by other local and regional utilities. Water service is provided by the Eugene Water and Electric Board (EWEB), and EWEB and the Emerald People's Utility District both provide electrical service to the airport. Telecommunications services are provided by Qwest and Lane Council of Governments. Natural gas is provided by Northwest Natural. On-site storm water runoff is controlled by piped and open channel drainage systems in the area.

Adoption of the master plan update will not require new services beyond those currently available

to serve airport and airport-related functions. Furthermore, extension of services for future development to meet the demands outlined in the master plan update is wholly consistent with the Metro Plan and prior City determinations.

In addition to the demonstration made through the above findings, an exception from Statewide Planning Goal 11 is not necessary based upon OAR 660-012-0065(1) and (3)(n). As previously described, these administrative rules preclude the need to take an exception to Goal 11 (and Goals 3, 4, and 14) if the proposed amendments do not permit service to a larger class of airplane. The current master plan update does not include any amendments to land use designation or proposed improvements through the planning horizon of 2026 that would permit service to a larger class of aircraft than is currently provided.

As such, adoption of the current master plan update is consistent with Goal 11 and will not affect Metro Plan compliance with the Goal.

**Goal 12 - Transportation: To provide and encourage a safe, convenient and economic transportation system.**

Goal 12 is implemented through the Transportation Planning Rule (TPR), as defined in Oregon Administrative Rule OAR 660-012-0000, *et seq.* The Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan) provides the regional policy framework through which the TPR is implemented at the local level. The TPR states that when land use changes, including amendments to acknowledged comprehensive plans, will significantly affect an existing or planned transportation facility, the local government must put in place measures to assure that the allowed land uses are consistent with the function, capacity and performance standards of those transportation facilities.

As previously described, adoption of the current master plan update does not include any amendments to the Metro Plan, adopted land use designations or existing zoning. No changes are proposed to the functional classification of any roadways serving the airport. Adoption of the updated refinement plan is not anticipated to reduce any existing transportation facilities below accepted levels of service or otherwise significantly affect any transportation facilities as outlined in the TPR. Unlike the prior adoption of amendments to implement the 1999 Airport Master Plan, the current master plan does not include any new planned transportation facility projects or major roadway realignments requiring formal plan amendments.

Consistent with OAR 660-012-0065(3)(n), the proposed airport improvements recommended in the updated master plan do not permit service to a larger class of airplanes. As noted in Chapter 3 (Section 2.2. Design Standards), the Eugene Airport will continue to accommodate the Boeing 737-300 aircraft which has an FAA Airport Reference Code (ARC) of C-III. The current air carriers at the Eugene Airport use smaller regional jet aircraft, and although not currently as common as in the past, the Boeing 737 has long been used as the critical design aircraft. To the extent that future airport improvements may result in additional motor vehicle traffic impacts, County traffic impact analysis requirements will be addressed as development and permitting occurs.

As the current master plan update is consistent with OAR 660-012-0065 as well as other OARs

within the state Transportation Planning Rule and ORS, adoption is consistent with Goal 12 and will not affect Metro Plan compliance with the Goal.

**Goal 13 - Energy Conservation: To conserve energy.**

The current master plan update is consistent with Goal 13 because the proposed airport development will strengthen the substantial investments made in the existing airport, enhance the viability of air transportation for people and goods proximate to the state's second largest population center, and offer an alternative to potentially less fuel-efficient transportation modes.

The recommendations contained in the master plan update will support a vital airport serving the air cargo, air mail, and commercial and general aviation needs of Eugene, Springfield, Lane County and the greater Eugene Airport service area. In meeting the updated master plan's demand projections and facility capacity requirements, considerable energy will be conserved from export passengers and air freight to more distant airfields, including Portland International Airport. Using alternative airports to meet commercial and general aviation demands and transporting air freight, mail, and cargo to more distant airfields by other transportation modes (i.e., truck or rail) for shipping would result in potentially less efficient energy use, contrary to the Goal.

There are a number of past and future examples that further illustrate the airport's ongoing commitment to energy conservation consistent with this Goal. The airport has in the past and will continue to strive for ways to reduce energy consumption. As individual projects and improvements contemplated in the updated Eugene Airport Master Plan are implemented over time, new technology and opportunities for energy conservation are certainly considered to reduce cost and impact on the environment.

For example, construction of new facilities at the airport is required to follow Leadership in Energy and Environmental Design (LEED) guidelines consistent with City's adopted Sustainable Buildings Policy. This represents a significant local commitment to the use of "green building" techniques and energy conservation over time. It is also notable that the airport now has 767 taxiway lights that are LED. 475 of these were converted from 45 watt quartz lamps to 8 watt LED lights which will result in substantial energy savings. A cost benefit analysis is planned for replacing current terminal lighting from T-8 fluorescent lights with LED lights as well. The airport will also be rehabilitating the passenger breezeway with LED lights for energy conservation. If the FAA approves more airfield uses for LED lighting in the future, the airport will analyze the use and conduct a benefit analysis for implementing the technology further.

While Lane Transit District (LTD) bus service is not currently available to the airport, shuttle service is provided and the airport continues to explore possibilities that would support economically viable public (or shared private) transportation options to reduce non-renewable energy use and parking demand at the airport. All airport vehicles running diesel fuel are now operating off of Bio-5 or Bio-20 fuel and analysis will also be conducted on the feasibility of adding electric vehicle charging stations to the public parking lots in the future. Bicycle storage lockers are also available at the airport to accommodate and support alternative transportation options.

Based on these findings and the available information, adoption of the current master plan update

is consistent with Statewide Planning Goal 13 and will not affect Metro Plan compliance with the Goal.

**Goal 14 - Urbanization: To provide for an orderly and efficient transition from rural to urban land use.**

Goal 14 requires that comprehensive plans provide for orderly and efficient transition from rural to urban land uses, and the establishment of Urban Growth Boundaries (UGBs) around incorporated cities to assure compact and efficient urban growth inside the UGB and protection of rural resources outside of it.

Findings included in the Metro Plan Transportation Element (Page III-F-11) specifically note that the Eugene Airport is located outside the UGB to protect it from incompatible development as well as to reduce airport-related impacts on development within the UGB. It also notes that the area of airport designated government and education on the Metro Plan diagram receives municipal water, wastewater, fire, and police services. As previously discussed with respect to Goal 11, adoption of the master plan update will not require new urban services beyond those currently available to serve airport and airport-related functions. Furthermore, extension of services for future development to meet the demands outlined in the master plan update is wholly consistent with the Metro Plan and prior City determinations. Metro Plan Policy F.30 also supports the use of the Eugene Airport Master Plan as the guide for improvements of facilities and services at the airport.

As previously noted, OAR 660-012-0065(1) and (3)(n) preclude the need to take an exception to Goal 14 because the proposed improvements do not permit service to a larger class of airplanes.

As such, adoption of the current master plan update is consistent with Goal 14, and will not affect the Metro Plan compliance with the Goal.

**Goal 15 - Willamette River Greenway: To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.**

The Eugene Airport is not within the boundaries of the Willamette River Greenway. Therefore, Statewide Planning Goal 15 is not relevant, and adoption of the master plan update will not affect Metro Plan compliance with Goal 15.

**Goal 16 through 19 - Estuarine Resources, Coastal Shorelands, Beaches and Dunes, and Ocean Resources:**

There are no coastal, ocean, estuarine, or beach and dune resources in proximity to the Eugene Airport. Therefore, these goals are not relevant and adoption of the master plan update will not affect compliance with Statewide Planning Goals 16 through 19.

### **Metro Plan Consistency -- EC 9.8424(1)(b) and LC 12.060**

The Metro Plan serves as the area's comprehensive, policy framework plan. The current update to the Eugene Airport Master Plan replaces earlier versions as a refinement to the Metro Plan, and is found to be consistent with the policy framework already established by the Metro Plan. As previously discussed, adoption of the updated master plan is supported by a variety of Metro Plan policies including the following from the Transportation Element (Policy F.30, Page III-F-12):

Support public investment in the Eugene Airport as a regional facility and provide land use controls that limit incompatible development within the airport environs. Continue to use the Eugene Airport Master Plan as the guide for improvements of facilities and services at the airport.

As stated previously, unlike the adoption process for the 1999 Airport Master Plan, the current update does not include any amendments to the Metro Plan or other locally adopted plans such as the Eugene-Springfield Transportation System Plan (Transplan). No changes to existing land use designations, zoning, or adopted policy are proposed. The current update does include recommendations for a variety of airport improvements that will accommodate the Airport's needs into the future, some of which will require further research and analysis to determine the need and timing for any future Metro Plan amendments or zone changes in the vicinity. It is emphasized that any specific Metro Plan amendments or zone changes necessary to implement the recommendations of the updated Eugene Airport Master Plan will require additional public process and formal adoption by the affected jurisdiction(s) in the future.

Based on the available information and findings above, adoption of the current master plan update is consistent with the Metro Plan and will not otherwise make the Metro Plan internally inconsistent, as required.

### **Refinement Plan Criteria -- EC 9.8424(1)(c) and (2)**

Adoption of the current Eugene Airport Master Plan update will entirely replace earlier adopted versions and there are no remaining portions of prior plans to be addressed under EC 9.8424(1)(c). The need for adoption of the updated refinement plan is based on federal and state and local requirements for coordinated aviation planning. Consistent with EC 9.8424(2)(b), new inventory information contained in the master plan update, concerning airport facilities and projected demand, supports the recommendations for future improvements to accommodate the Eugene Airport's needs through the planning horizon of 2026.

# Eugene Airport Master Plan Update Executive Summary



Prepared for  
City of Eugene, Oregon



Prepared by

**MEAD  
&  
HUNT**

May 2010

The Federal Aviation Administration (FAA) developed the airport master planning process to assist the nation's airports with expansion and improvement plans that meet aviation demand and safety requirements. The Master Plan Update for the Eugene Airport (EUG) provides a development and expansion framework for a 20-year planning period starting from base year 2006.

### Plan Goals and Objectives

The goal of the Master Plan Update is to guide future airport development to meet future aviation demand, and consider potential environmental and socioeconomic impacts. To achieve this goal, the Master Plan Update includes the following elements.

- **Demand, capacity, and facility requirements analysis** – Based on the projections of aviation demand, facility requirements were determined and compared to the existing capacity of the airport facilities.
- **Alternative plan concepts** – Once facility needs were determined, alternative methods to meet those needs were developed. These alternatives were evaluated against operational, financial, environmental, and other feasibility-related criteria.
- **Financial plan** – A financial plan was developed that identified strategies and funding sources for proposed capital improvements. Airport improvements are typically funded using a combination of Federal grants (up to 95% of the funding can come from the Aviation Trust Fund, which is derived from fees collected from users of the national aviation system), and local monies earned through Airport operations.
- **Airport Layout Plan** – The Airport Layout Plan (ALP) was updated as a part of the planning process. The ALP provides the official graphic representation of the Airport's existing and proposed facilities. Once the FAA approves the ALP, projects may be eligible for Federal grant funding.

Many of the features described are depicted in an exhibit on the last page of this Executive Summary.



## General Background

The FAA National Plan of Integrated Airport Systems (NPIAS) identifies over 3,300 airports significant to national air transportation, and eligible to receive grants. The 2007-2011 NPIAS shows Eugene Airport as a Non-Hub, Commercial Service, Primary Airport. The basic Airport service provider to the community is Commercial Service – Primary. A Non-Hub commercial service airport accounts for less than 0.05 percent of total U.S. Passenger enplanements, but more than 10,000 annual enplanements. EUG has historically been a Small Hub airport, accounting for between 0.05 and 0.25 percent of total U.S. passenger enplanements, but it qualified as a Non-Hub in 2006. Eugene is the second busiest airport in Oregon, behind Portland International Airport.

EUG's service area includes Lane, Benton, Douglas, and Linn Counties. The service area is a function of geography, and access to EUG and other commercial service airports. EUG's service area extends approximately 60 miles from the Airport, about one hour's drive. The four counties' proximity to Interstate 5 provides relatively easy access to the Airport. EUG is served by four scheduled passenger airlines: Delta Connection, Horizon Air, Allegiant Air, and United Express. Daily scheduled service connects EUG to 10 U.S. cities, by up to 23 departures and 23 arrivals.





## Public Participation

Airport officials, community leaders, and the general public all play an important role in the master planning process. A Master Plan Advisory Committee was appointed to assist in the preparation of this Plan, and met regularly throughout the study period to ensure that a comprehensive, community based perspective was incorporated into the project. The Advisory Committee was comprised of the following individuals.

- Linda Ackerman – Airport Advisory Committee
- Dr. Harvey Birdseye – Lane Community College, Aviation Academy
- Ruthann Couch – Air Traffic Control Tower, FAA (retired)
- Steve Dignam – Lane County Planning Commission
- Ellie Dumdi – Former Lane County Commissioner, Junction City Resident
- Phillip Farrington – Peace Health
- Bruce Fisher – FAA Seattle Airports District Office
- Gabe Flock – City of Eugene Planning & Development
- Denny Guehler – Active Bethel Citizens
- Randy Hledik – Eugene Planning Commission
- Keir Miller – Lane County Land Management
- Paul Redhead – Airport Advisory Committee
- Jackie Robertson – Commercial Airline Pilot
- Steve Senderling – Airport Advisory Committee
- Claire Syrett – Airport Advisory Committee
- Andy Vobora – Lane Transit District
- Kurt Yeiter – City of Eugene Engineering/Transportation

Six committee meetings occurred at key points during the Master Plan Update. In the meetings, the Consultant and Airport staff discussed Master Plan Update recommendations and solicited input and questions from the Advisory Committee. Draft Plan documents were delivered to the Committee for review, in advance of meetings for group discussion. Committee meetings were held in the Airport Administration Office on: December 6, 2006; February 28, 2007; August 23, 2007; November 8, 2007; August 13, 2008; and June 22, 2009. Committee meetings lasted approximately one hour, over lunch, and consisted of Airport and Consultant staff presenting and discussing items with the Advisory Committee. Exhibit boards were displayed to support discussion.

Four public informational meetings were held at key points during the Master Plan Update. In the meetings, the Consultant and Airport staff presented the Master Plan Update recommendations, and solicited input and questions from the general public. The public informational meetings were held in the Airport Administration Office on: August 23, 2007; November 8, 2007; August 13, 2008; and June 22, 2009. Exhibit boards were displayed to support discussion.



## Projections of Aviation Demand

### Existing and Historical Levels of Activity

The components of aviation activity that were evaluated included passenger enplanements, aircraft operations, based aircraft, and air cargo volume. These levels are summarized in the following table.

| <b>Summary of Aviation Demand Forecasts</b> |                               |                            |                       |                        |
|---------------------------------------------|-------------------------------|----------------------------|-----------------------|------------------------|
| <b>Year</b>                                 | <b>Passenger Enplanements</b> | <b>Aircraft Operations</b> | <b>Based Aircraft</b> | <b>Air Cargo (lbs)</b> |
| 2006 actual                                 | 360,258                       | 92,779                     | 178                   | 2,096,778              |
| 2011                                        | 412,873                       | 83,796                     | 205                   | 2,538,810              |
| 2016                                        | 445,593                       | 87,975                     | 209                   | 3,068,410              |
| 2026                                        | 557,736                       | 102,179                    | 220                   | 4,416,957              |
| Compounded Annual Growth Rate 2006-2026     | 2.21%                         | 0.52%                      | 1.1%                  | 3.8%                   |

### Passenger Enplanements

The Airport has scheduled and unscheduled passenger air service. Airline passenger enplanements (the number of people that board a commercial aircraft) are recorded by service providers and forwarded to the FAA. The number of enplanements is influenced by several elements including socioeconomic factors, aviation trends, and ticket prices. Enplanements at Eugene Airport increased from 317,521 in 1997 to 360,258 in 2006.



### Peak Aviation Demand Characteristics

Since EUG, similar to many commercial service airports, must be designed to accommodate peak demand in some categories, projecting future activity levels involves the projection of peak activity levels.

Peak aviation demand numbers are presented in the following table.

| Peak Aviation Demand Characteristics |                     |                           |                     |        |          |         |
|--------------------------------------|---------------------|---------------------------|---------------------|--------|----------|---------|
| Peak Factor                          |                     | Passenger<br>Enplanements | Aircraft Operations |        |          |         |
|                                      |                     |                           | Commercial          | GA     | Military | Total   |
| 2006<br>actual                       | Annual              | 360,258                   | 24,777              | 66,185 | 1,817    | 92,779  |
|                                      | Peak Month          | 37,922                    | 2,478               | 6,619  | 182      | 9,278   |
|                                      | Peak Month Avg. Day | 1,223                     | 80                  | 214    | 6        | 299     |
|                                      | Peak Hour           | 306                       | 20                  | 53     | 1        | 75      |
| 2011                                 | Annual              | 412,873                   | 17,874              | 66,393 | 1,763    | 83,796  |
|                                      | Peak Month          | 43,460                    | 1,787               | 6,639  | 176      | 1,862   |
|                                      | Peak Month Avg. Day | 1,402                     | 58                  | 214    | 6        | 62      |
|                                      | Peak Hour           | 350                       | 14                  | 54     | 1        | 16      |
| 2016                                 | Annual              | 445,593                   | 17,736              | 69,790 | 1,763    | 87,975  |
|                                      | Peak Month          | 46,905                    | 1,774               | 6,979  | 176      | 1,955   |
|                                      | Peak Month Avg. Day | 1,513                     | 57                  | 225    | 6        | 65      |
|                                      | Peak Hour           | 378                       | 14                  | 56     | 1        | 16      |
| 2026                                 | Annual              | 557,736                   | 19,920              | 81,216 | 1,763    | 102,179 |
|                                      | Peak Month          | 58,709                    | 1,992               | 8,122  | 176      | 2,271   |
|                                      | Peak Month Avg. Day | 1,894                     | 64                  | 262    | 6        | 76      |
|                                      | Peak Hour           | 473                       | 16                  | 65     | 1        | 19      |



## Facility Requirements

### Runway 16R/34L

Runway 16R/34L is currently 8,009 feet long, which accommodates aircraft currently operating at EUG and those projected through 2026. The ability to extend the runway to 9,200 feet has been developed as part of previous Master Plans; this ability should continue to be preserved, so that the need can be accommodated once it is justified.

### Runway 16L/34R

Runway 16L/34R is currently 6,000 feet long. This 6,000-foot length accommodates the aircraft fleet for which the runway was designed. However, situations may arise resulting in the primary Runway 16R/34L being offline, making Runway 16L/34R the only available runway. It is expected that extending Runway 16L/34R from 6,000 feet to 6,500 feet will allow a greater range of air carrier aircraft to operate on the runway. This will prevent scheduled commercial service from having to divert to other airports, when 16R/34L is not operational.

### Taxiway system

EUG benefits from an elaborate taxiway system, including full parallels to both runways, a midfield connector, and several routes to terminal areas. These taxiways provide direct access between the terminal apron and runways. Some taxiways are not meeting current design criteria for the aircraft that are operating at the Airport. Improvements can also be made to make the system more efficient as a whole.

### Passenger Terminal Area

The main passenger terminal area is the face of EUG to the local community. It is where the traveling public comes to park their car, pick-up someone, or embark on a flight. The existing terminal building has an area of approximately 89,000 square feet, and has ten aircraft boarding gates. In 2006 the terminal accommodated approximately 360,258 enplanements. Based on the long-term forecasted passenger enplanements of 557,736 annually, 14 gates (four additional) and 100,000 square feet (11,000 additional) are expected to be required.

### Other Terminal Areas

The Airport has four terminal areas (in addition to the main passenger terminal area): North Ramp, South Ramp, East General Aviation Ramp (EGAR), and Hollis Lane Aviation Area. These areas are home to airport and aircraft services, aviation-related businesses, and aircraft storage. Together they provide 37 box hangars, 130 T-hangar units, and 144 tie-downs. Facility analysis and requirements determined a need for 20 additional box hangars, 20 additional T-hangar units, and two additional tie-downs. As each of the four terminal areas has available space, the development should be distributed over the areas, as best suited for the particular facility.

New developments are expected to be evaluated for the most suitable site, as they are introduced to the Airport. It is expected that as hangars reach the end of their useful and economic lives, they will be replaced with similar structures in their current locations.



**Aircraft Rescue and Fire Fighting (ARFF) Facility**

A new ARFF facility (under construction 2010) is needed to replace the existing facility (which has reached the end of its useful functional and economical life), and to meet incident response time requirements to each runway, which cannot be attained from the current facility with existing equipment.

**Aircraft Deicing Facility Area**

The aircraft deicing (and anti-icing) process involves the application of a liquid via pressurized spray. The majority of deicing agent not adhering to the aircraft requires containment, collection, storage, and disposal or treatment. The introduction of one central deicing ramp eases the application and handling of the deicing agent, and reduces the number of ground support vehicles near the passenger terminal relieving apron congestion during peak time periods. An additional benefit to one central location is that the new facility could also serve as an aircraft washing location, further reducing activity and congestion within the terminal area.

**Miscellaneous Airside Facility Requirements**

The existing aircraft fuel storage facility (fuel farm) is located along the entrance road to the North Ramp area, Lockheed Drive, and consists of five above-ground fuel storage tanks. There is room for only one additional fuel tank in the existing facility. The fuel farm must be accessible to tanker trucks delivering fuel, and on-airport vehicles ferrying fuel to airfield ramps and aircraft. The location of the fuel farm requires tanker trucks to travel the same roads as other traffic to reach the passenger terminal. Fuel delivery and transfer between storage tanks can interfere with tenants and the public accessing the North Ramp. Because of this, it is beneficial to relocate the fuel farm away from the passenger terminal area, so that tanker trucks and fueling operations are removed from high concentrations of non-airfield traffic.

**Automobile Parking**

The Master Plan Update identified the following automobile parking needs: increase public automobile parking stalls from 1,276 to 2,310 (additional 1,034 stalls); increase rental car ready/return parking stalls from 144 to 245 (additional 101 stalls); and increase rental car service/storage stalls from 116 to 280 (additional 164 stalls). An increase is also expected for the overflow lot, from 585 to 872 (additional 287 stalls). Additional parking needs exist throughout the Airport to support aviation related businesses, other terminal areas, and on-airport FAA offices.

**Land Acquisition**

The FAA recommends that an airport own or control land that associated with airport design surfaces. There are two areas at the northern end of the Airport property that should be acquired. These areas are within the Runway Protection Zones (RPZs) for Runway Ends 16R and 16L. The RPZ is a design surface at the end of the runway that is required to enhance the protection of people and property on the ground and departing/arriving aircraft.



## Improvement Recommendations

### Development Alternatives

The Master Plan Update process included an analysis of alternative methods to accomplish the recommended airfield improvements. Alternatives were developed for each of the proposed major projects, and these were evaluated to arrive at the preferred alternative for each element, and the Airport as a whole. The alternatives evaluated included consideration of different locations on the airfield for each facility, as well as different geometric layouts within the selected locations. The following are the recommended improvements to be considered as needed.

### Runway 16R/34L and Runway 16L/34R

The Master Planning process recommends continuing to preserve the ability to extend the Runway 16R/34L to 9,200 feet, and Runway 16L/34R to 6,500 feet. These extensions will allow a greater variety of air carrier aircraft to operate on these runways, and prevent scheduled commercial service from having to and divert to other airports when one runway is temporarily not in operation.

### Taxiway system

Introduction of acute angle connectors north of Taxiway A4 and north of Taxiway A5 may help aircraft arriving on Runway End 34L to quickly exit to Taxiway A. A connection north of Taxiway A5 would bridge the runway with Taxiway P. These improvements would facilitate access between the primary runway and the Hollis Lane aviation area.

Modification of the existing right angle connector B2, which bridges Runway 16L/34R with Taxiways C and B, to two acute angle taxiways (one from Runway End 16L, one from Runway End 34R) connecting to Taxiway C may provide better flow. This configuration is similar to the existing intersection of Taxiways C, M, and P. Or, a new connector south of connector B2, to connect Runway 16L/34R to Taxiways B and M may provide a similar pattern.

Other taxiway connections, besides acute angle, may also improve ground circulation. For example, the introduction of a taxilane connecting the North Ramp to the EGAR would prevent aircraft from having to enter ATCT-controlled movement areas, thereby reducing congestion, and freeing ATCT for other tasks.

### Passenger Terminal Area

The main passenger terminal area should plan for additional gates through expanding existing Concourse B to the southwest, and adding a new Concourse "C" to the northeast. This will extend the concourse structure onto area currently used for ramp and terminal employee automobile parking, and into the old ATCT and office building area. This option will also require the expansion of the terminal ramp to serve the new gates. By introducing a new concourse, passengers are distributed over a greater area; more space is provided for business development within the terminal.



## Other Terminal Areas

**North Ramp** - The North Ramp has space for two additional box hangars in between the existing hangars. As the proposed ARFF facility is expected to be developed in this area, there is not room for additional T-hangars. A taxilane connecting the North Ramp to the EGAR is being considered. This taxilane would likely displace aircraft tie-downs, which could be relocated to the EGAR. Additional area is available for automobile parking, and the expansion of aviation related businesses.

**South Ramp** - There is space for one additional box hangar in between the existing hangars, but there is not room for additional T-hangars. Additional box hangars could be placed to the south of the existing T-hangars, but would occupy space being reserved and intended for commercial development.

**East Ramp** - The EGAR has room for 16 additional box hangars and 20 additional T-hangar units. Many of the sites have been prepared with access taxilanes and utilities. There is also room to expand the apron to the south. The EGAR is home to the only self-fueling facility for aircraft at EUG. This is a well-utilized facility, and space for additional fueling activities and storage should be preserved. EGAR currently has no fixed base operator (FBO – term for a pilot/aircraft service provider); however space is available and should continue to be reserved for FBO hangars and offices.

Coordinating the relocation of the Oregon Air & Space Museum to the EGAR area with the future alignment of Douglas Drive may increase the museum's attendance, and increase public awareness as automobile traffic enters the airfield and passes the building. These properties provide good opportunities for the Airport to provide a home for facilities which serve the community, and to make best use of its non-aviation property by incorporating airport-compatible development.

**Hollis Lane Aviation Area** - The Hollis Lane Aviation Area has room for 14 additional box hangars. Although there is space for T-hangars and aprons, the Hollis Lane Aviation Area is expected to be developed with corporate hangars, each with a small apron adjoining the existing taxilane.

The existing Hollis Lane Aviation Area taxilane that accesses the hangar sites should be extended to connect to Taxiway A. Long-term, the existing taxilane traveling north from Taxiway C, that ends after connecting to the Hollis taxilane, should be extended to connect to Taxiway A. These connections provide aircraft in the Hollis area efficient access to primary Runway 16R/34L. A taxiway extension connecting Taxiway C and Taxiway A, or an ARFF vehicle access lane in the same location should also be considered.

Many configurations for development can be accommodated depending on the requirements and preferences of the proposed improvement.



**Aircraft Rescue and Fire Fighting (ARFF) Facility**

The new ARFF facility (under construction 2010) site is the area south of Taxiway C, near the northern end of the north terminal area. This location supports the required response time to the airfield.

**Aircraft Deicing Facility Area**

There are two potential locations for the deicing facility. One location is southwest of the main passenger terminal building, on the south ramp. The other location is northwest of the main passenger terminal, at the intersection of the terminal apron with Taxiway A. Both sites can likely accommodate Boeing 757-size aircraft for deicing, and both can also function as an aircraft washing area. As deicing generally occurs after passenger loading and before take-off, locating the deicing facility along the way to primary Runway 16R/34L should prevent most aircraft from having to deviate significantly from the main taxiway route.

**Miscellaneous Airside Facility Requirements**

The fuel farm would be better located in the south airfield area, which would allow fuel delivery vehicles to exit Douglas Drive before entering the Airport circulation road. This will allow them to operate in an area less concentrated with the traveling public. This new fuel farm will accommodate the existing fuel tanks, and provide space for expansion to accommodate the forecasted demand. This location is also closer to on-airport businesses that provides fueling, and closer to parking for aircraft fueling vehicles.

**Automobile Parking**

As passenger enplanements and aircraft operations at EUG are expected to increase, so is the automobile parking. A single development scenario for expansion of automobile parking near the main passenger terminal is presented. This is a refinement of previous plans to expand public and rental car auto parking in phases. The rental car storage and service lot should be relocated to the south near the air cargo operations, freeing up additional space for public parking within the existing main parking lot. Additional spaces can be added to the existing overflow lot as demand increases.

Aviation related businesses and other terminal areas throughout the Airport have potential to increase the number of parking spaces as demand increases. The FAA offices located at EUG also have space for additional parking to support their operations.

**Land Acquisition**

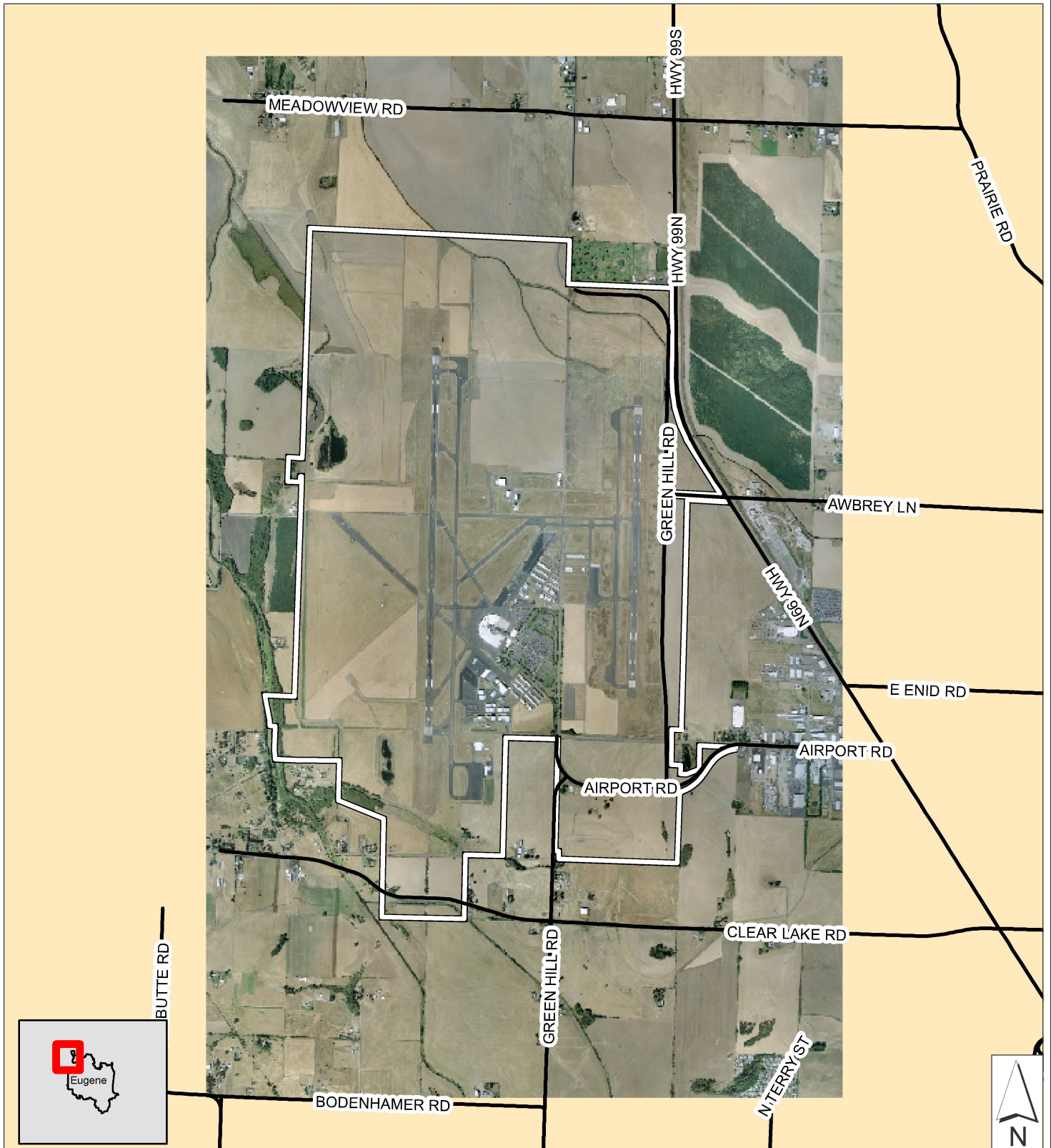
As properties around the Airport become available, consideration should be given to land acquisition. The RPZs for Runway Ends 16R and 16L extend onto parcels not owned by the Airport. Parcels in the RPZ, and other parcels near runway ends, are candidates for acquisition, as Airport control of these parcels allows for protection of aircraft operations, and for people and property on the ground. Acquisition of parcels within the RPZ has historically been an FAA priority.







# Eugene Airport Vicinity Map



Caution: This map is based on imprecise source data, subject to change, and for general reference only.

— Approximate Property Boundary



April 12, 2010