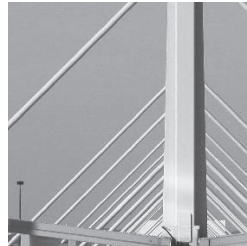
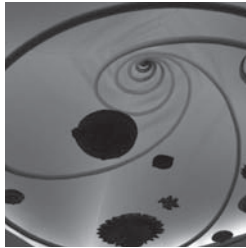


Executive Summary
MASTER PLAN



THE
**EASTERN
IOWA AIRPORT**
CEDAR RAPIDS





INTRODUCTION

The Eastern Iowa Airport (CID) is a publicly-owned facility located in and operated by the City of Cedar Rapids. The Airport serves commercial passenger and cargo airlines as well as private general aviation (GA) activity. It is the second busiest Airport in the State of Iowa in terms of both aircraft operations (takeoffs and landings) and passenger enplanements.

The Federal Aviation Administration (FAA) has 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 Eastern Iowa Airport Master Plan, completed in 2013, will provide a blueprint for activity and development at the Airport for the next 20 years. Master Plan recommendations are based on historical activity at the Airport, the condition of existing facilities, and forecasted levels of aviation-related activity.

The goal of the Master Plan is to provide an outline to satisfy aviation demand in a financially feasible and sustainable manner, while taking into account environmental, socioeconomic, and other impacts associated with Airport operations and development.

This executive summary provides an overview of the various components of the Master Plan, including the following:

- **Inventory of Existing Conditions** – In order to determine future infrastructure demands, an inventory of existing facilities must be completed. This step examines existing airside and landside infrastructure to determine present condition and adequacy to accommodate current and future demand, as well as compliance with FAA design requirements. Airside facilities include runways, taxiways, aprons, aircraft parking and storage areas, airfield lighting, navigational aids, and airspace. Landside components include the airport terminal building, vehicle access, automobile parking and support facilities.

- **Aviation Activity Forecasts** – This element of the plan focuses on factors that influence aviation demand, and presents projections that reflect local and national trends. Factors that can affect demand include income, employment, population, market share, and aviation industry trends. The components of aviation demand considered in this study include enplaned passengers, aircraft operations (takeoffs and landings), based aircraft, and peaking characteristics.

Inventory of Existing Conditions



■ **Facility Requirements** – Based on the aviation activity forecasts, facility needs are determined and compared to the existing capacity of the various airport facilities described in the inventory element. This analysis results in recommendations that provide the basis for development of alternatives related to Airport needs, facilities, staffing, and funding.

■ **Alternatives Analysis** – After facility needs are determined, alternatives are developed to meet those needs. The alternatives presented in this Master Plan consider various improvement scenarios that meet the facility requirements, and are evaluated against operational, financial, environmental, and other feasibility-related criteria. “Preferred” alternatives for each facility category are then identified.

■ **Environmental Overview and Land Use Plan** – This element of the study presents an overview of environmentally sensitive features and land uses on and surrounding the Airport, and identifies potential impacts to these features and land uses resulting from the recommended development plan. The intent is to provide information regarding environmental resources for general airport planning purposes.

■ **Financial Analysis** – The financial plan evaluates the Airport’s capability to fund the recommended projects and other items which comprise the six-year capital improvement program (CIP, FY2013-2018). A preliminary funding scenario is presented for each project from FAA Airport Improvement Program (AIP), Passenger Facility Charge (PFC), Iowa DOT, local, and other funding sources, based in part on a detailed cash flow analysis conducted specifically for the Master Plan.

The Master Plan follows FAA guidelines as described above, but also focuses on operational and functional topics of unique interest to The Eastern Iowa Airport given local circumstances. These areas of emphasis include:

- **Passenger Terminal Building Space Assessment**
- **Concourse Gate Capacity Analysis**
- **Terminal Expansion Scenarios**
- **Terminal Area Vehicle Access, Circulation, and Parking Improvements**
- **Airfield Demand/Capacity Analysis**
- **Crosswind Runway 13/31 Extension Scenarios**
- **Navigational Aid Improvements**
- **Aircraft Deicing**
- **Real Estate Study**

The Inventory component of the Master Plan documents existing conditions on and surrounding the Airport. Much of the detailed information presented in the Inventory chapter is supplemented in subsequent chapters of the Master Plan, as appropriate, to support the various technical analyses required for the project.

The Inventory chapter covers a broad spectrum of information related to the Airport’s location and role, its historical aviation activity, and its airside, landside, and terminal area facilities. Information presented in the Inventory chapter was collected from existing data provided by the Airport and its engineering consultant, relevant public plans and reports, on-site visual inspections, and interviews with Airport and tenant staff.

Aviation Activity Forecasts

Forecasts form the basis for future demand-driven improvements at the Airport; provide data from which to estimate future off-airport impacts such as noise and traffic; and are often incorporated by reference into other studies and policy decisions at the local, State, and Federal level.

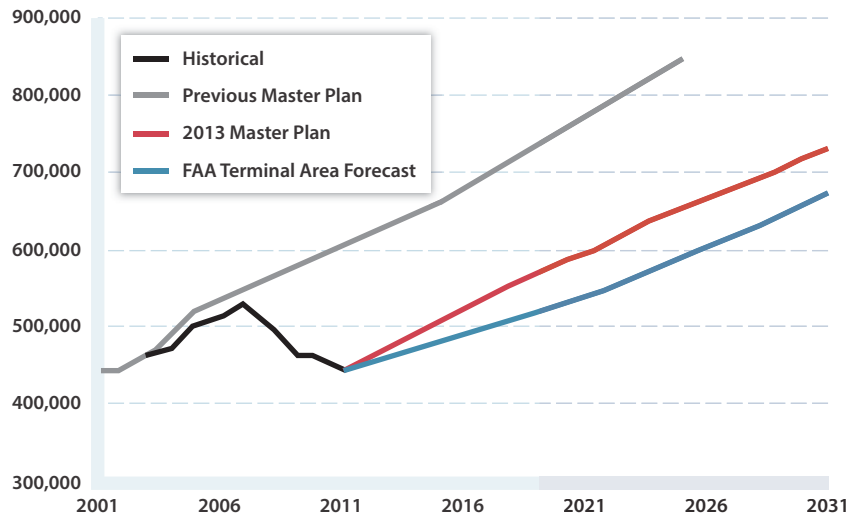
The Forecasts chapter identifies preferred 20-year forecasts selected from a variety of projections developed using different approaches, including time-series, market share, and socioeconomic methods.

The preferred Master Plan Forecast predicts 60% growth in passenger enplanements (boardings) over the next 20 years (see Passenger Enplanement Forecast Comparison graph). The Airport needs to prepare for steady passenger growth, especially given that enplanement growth in 2012 and 2013 has been stronger than anticipated by the Master Plan Forecast.

Other conclusions from the Master Plan Forecast chapter can be summarized as follows:

- **Passenger Aircraft Size and Load Factor.** The average number of passengers per airline flight is expected to increase significantly in the future, as airlines phase out smaller aircraft and seek to increase passenger load factors to the maximum extent possible.
- **Commercial Aircraft Operations.** The preferred forecasts predict slow but steady growth in overall commercial aircraft operations (takeoffs and landings), rising from 26,561 in 2011 to 30,632 in 2031.

■ Passenger Enplanement Forecast Comparison



- **Based Aircraft.** Growth in based aircraft is expected to be strong, rising from 144 total based aircraft in 2011 to 249 in 2031.
- **General Aviation Operations.** The preferred GA operations forecast projects steady growth, rising from 25,585 GA operations in 2011 to 34,841 in 2031.
- **Air Cargo.** The preferred air cargo forecast predicts strong growth in annual air cargo, rising from 64,430,349 pounds in 2011 to 91,248,145 pounds in 2031. Increases in cargo aircraft operations, as well as transitions to larger cargo aircraft, are expected to accommodate future increases in cargo volumes.
- **Peaking Characteristics.** For peak passenger and aircraft operations, the preferred forecast identified the “design hour” flows of passengers and aircraft, which are estimates of the peak hour of the average day of the busiest month at the Airport. The peak passenger activity forecast predicts steady growth in total peak hour passengers, rising from 448 in 2011 to 757 in 2031. The peak aircraft operations forecast predicts slower growth in peak hour operations, rising from 25 in 2011 to 33 in 2031.

An Air Service Market Research report and a Passenger Demand Analysis were also completed as part of the Master Plan. The Air Service Market Research report presents data to help understand the air service market for CID, including identifying the threat of potential air service reductions and defining future potential air service improvements. The Passenger Demand Analysis describes travel patterns of local passengers who reside in the Airport’s geographic area, including the amount of passenger diversion to other airports.

Airside Facilities

Using the growth scenarios identified by the Forecasts, the Master Plan provides a review of airside facility requirements in an effort to establish future airside development needs for the Airport.

Airside facilities examined include runways, taxiways, runway protection zones, and navigational aids. Detailed analyses were conducted for the following:

- **Historic Cloud Ceiling and Visibility**
- **Runway Wind Coverage**
- **Airfield Demand/Capacity**
- **FAA Dimensional Criteria**
- **Runway Length Requirements**

Based on the facility requirements analysis, the Master Plan recommends the Airport plan for the following improvements to the airfield over the next 20 years. These improvements are depicted on a Conceptual Development Plan, and include the following:

- **Runway 9/27.** This runway should be maintained in its current configuration, but the Airport should pursue the implementation of a Special Authorization CAT-II instrument approach to the runway to improve accessibility during inclement weather. The Airport should also plan for ground equipment requirements associated with a conventional CAT-II system, in the event that future operations justify the implementation of such an approach.
- **Runway 13/31.** The Master Plan identified the need for additional length for this runway, as it is heavily utilized by air carriers operating at the Airport. The runway length analysis determined that an additional 1,200 feet of takeoff runway length would be beneficial to air carriers and business jets currently using and anticipated to use this runway in the future. Given existing constraints surrounding this runway,

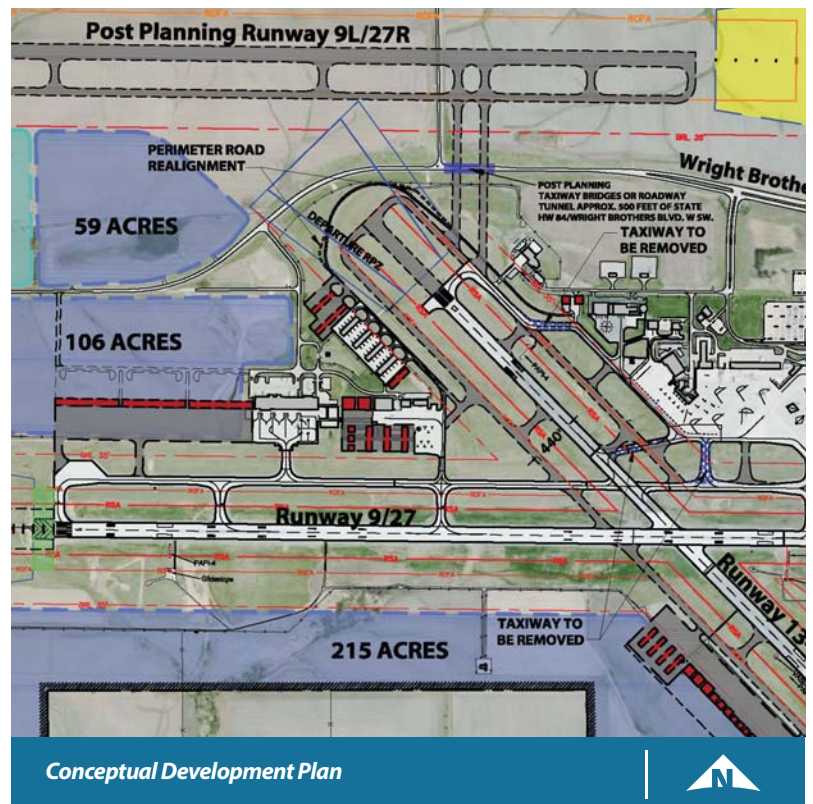
1,000-foot runway extensions to each end of the runway are recommended as a potential solution. These runway extensions would be available for takeoff only by publishing declared distances available for specific operation types.

- **Future Parallel Runway.** The Airport has historically reserved space north of Wright Brothers Blvd SW for the future construction of a third runway parallel to Runway 9/27. The purpose and need for this parallel runway is to increase airfield capacity when aircraft operations reach a level at which aircraft delays become unacceptable. Aircraft operations at the Airport are not expected to reach these capacity-constrained levels within the 20-year planning period. However, prudent planning dictates that space should continue to be reserved for this runway in the event that operations increase at a more rapid rate than projected by activity forecasts. The Master Plan recommends that the future parallel runway be located at a 4,750-foot separation from Runway 9/27.

- **Taxiways.** Improvements to partial parallel Taxiway “E” should be pursued, and additional improvements to Taxiways “B” and “E” should be considered.

- **Hangars.** The Master Plan includes an aircraft storage requirements forecast that identifies the type of tie-down and hangar facilities that will be needed to meet projected demand for aircraft storage in each five-year development phase. Planned locations for future hangar development are shown on the Conceptual Development Plan.

- **Air Cargo.** The Airport is poised to continue to grow its air cargo traffic in the coming years, primarily due to its strategic location in eastern Iowa, the large number of nearby industries, and the Airport’s ability to support cargo jet operations. The current Airport Layout Plan (ALP) shows cargo facility expansion west of the existing FedEx facility. This future cargo development area has the capacity to accommodate organic expansion in FedEx operations; relocation of UPS, USPS, and/or DHL once the east cargo building reaches the end of its useful life; and/or addition of a new regular cargo carrier.



Vehicle Access, Circulation, and Parking

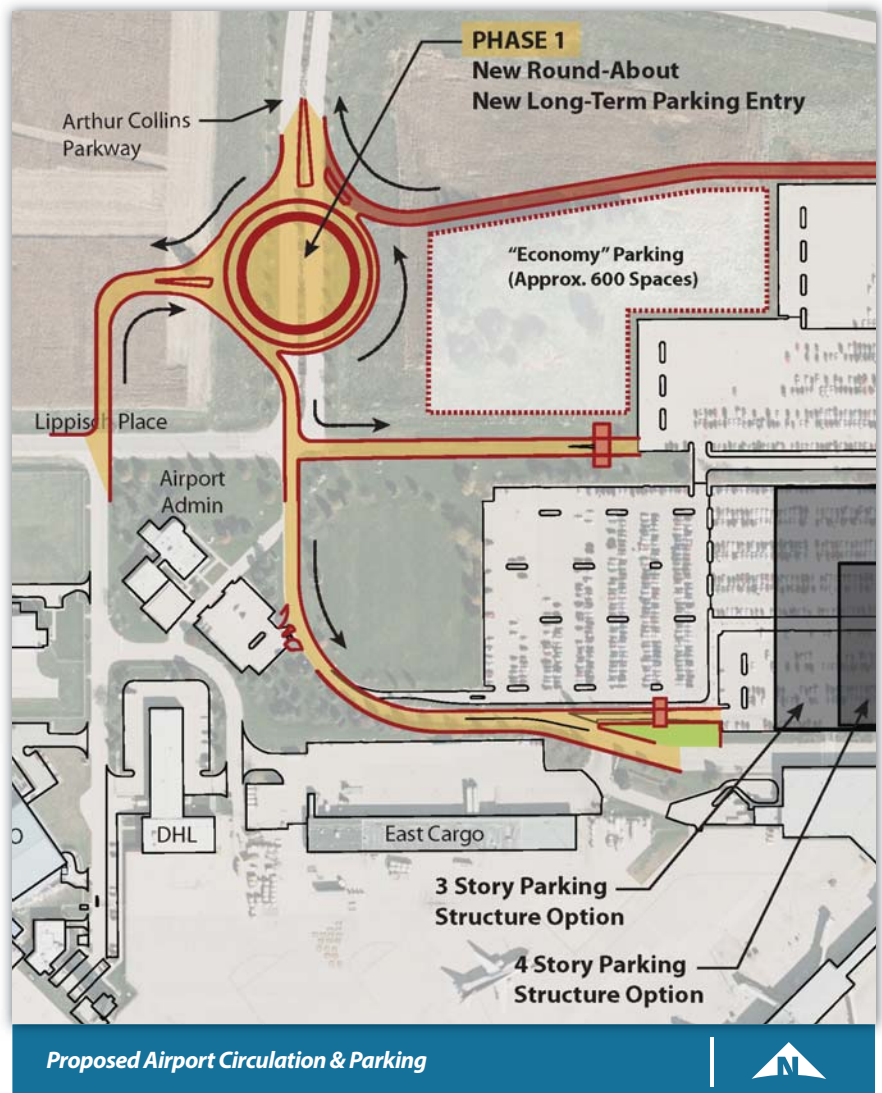
Based on discussion with Airport staff and information collected during the Inventory portion of the Master Plan, seven primary functional issues were identified with vehicle access and circulation in the terminal area, as summarized below.

1. **The short-term and long-term parking entrances are too close to one another and to the terminal curbside.**
2. **The lack of traffic calming measures and visual monuments for terminal building entrances/exits at the curbside contributes to higher-than-desired vehicle speeds and missed opportunities for passenger pick-up/drop-off.**
3. **The curbside area for taxis, shuttles, and returning rental cars has inadequate parking and circulation controls.**
4. **The lack of a loop road requires awkwardly placed turnaround loops to the parking lots.**
5. **The intersections near the terminal exit on 18th Street and Wright Brothers Boulevard are closely spaced and may cause traffic congestion.**
6. **Motorists wishing to return to the terminal once exiting Arthur Collins Parkway must make three left turns across traffic.**
7. **Access to the UPS/USPS cargo building is difficult for large trucks.**

Parking requirements forecasts were developed for the Master Plan based on historical ratios of parking occupancy to enplanement activity during the typical month of peak enplanement activity (March). The parking requirements model indicates that the long-term public parking lot currently has a surplus of 812 spaces, and that a long-term public parking deficit will occur between

2021 and 2026. The model also shows that there is currently a 16-space deficit in the short-term public parking lot, which is projected to increase to a 334-space deficit in 2031. Based on balanced consideration of the results of the parking requirements analysis, the Master Plan recommends that the Airport consider the addition of approximately 1,000 additional long-term/short-term parking spaces within the next ten years to accommodate projected enplanement activity through the 20-year planning period.

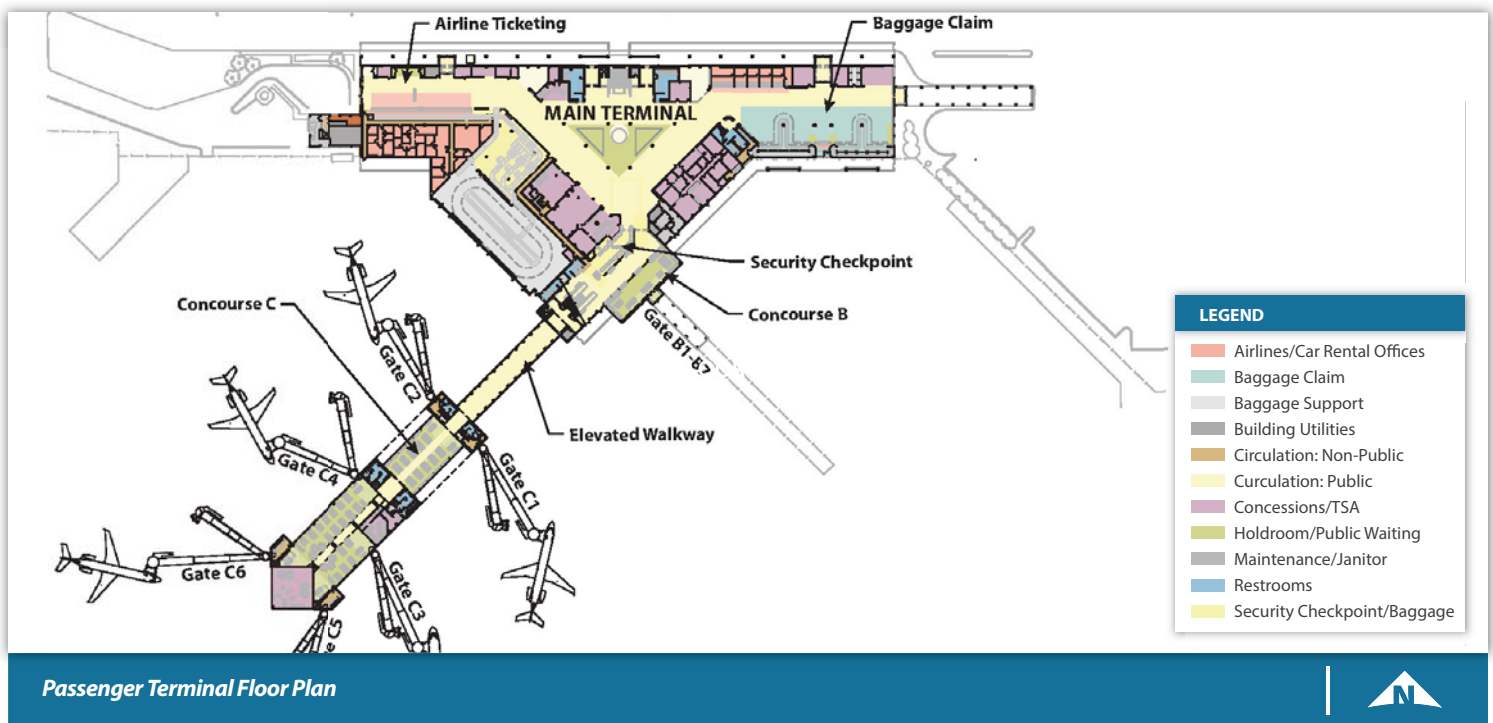
The recommended conceptual layout for vehicle access, circulation, and parking in the terminal area is shown below. This alternative involves constructing a roundabout north of the existing intersection of Arthur Collins Parkway and Lippisch Place; providing a new long-term parking entrance to the immediate south of the roundabout; and constructing a one-way loop road that allows motorists to return to the terminal building without using Wright Brothers Boulevard. This conceptual layout also includes potential locations and dimensions for a three-story or four-story parking structure which could be built in phases as parking demand dictates. Potential “economy” parking lot expansions are also shown; however access to these locations will likely require shuttle service to the terminal building.



Terminal Building: SPACE

Terminal Building: SPACE/CAPACITY ASSESSMENT

An inventory of current terminal space allocations by category (e.g. rental cars, circulation, baggage claim, etc.) was created based on existing floor plans, visual inspection, and discussions with Airport and tenant staff. This terminal space inventory was compared to the peak passenger activity forecasts to determine existing deficiencies and surpluses in square footage, as well as future square footage needs. This assessment is based on industry standards, consultant experience, and input from the Airport. The following sections describe current deficiencies and surpluses in the curbside and public entries, the non-secure area, the security checkpoint, the secure area, and the passenger boarding bridges.



Passenger Terminal Floor Plan

Overall Terminal Space Assessment

The total size of the existing terminal is roughly 127,000 square feet. The overall amount of area in the existing passenger terminal is greater than planning design standards recommend for an airport with the number of enplanements seen at CID. However, a more detailed analysis was conducted to determine if the each of functional areas within the passenger terminal is the appropriate size.

Curbside and Public Entries

Visual cues that provide information to motorists are difficult to read from a moving vehicle. For example, crosswalks to the parking lot are poorly marked, entries to the building are not clearly visible, and signage associated with the curbside area is small and difficult to read.

Non-Secure Area

The existing amount of non-secure area is greater than planning design standards recommend until the last few years of the 20-year planning period. However, the existing public space configuration in this area is no longer functioning optimally. Improvements to the proportions and locations of passenger amenities such as waiting areas, public circulation, passenger queuing, ticketing kiosks, and non-secure concessions will benefit the Airport. A location should also be identified for self-checked baggage to occur in the future.

Security Checkpoint

The existing checkpoint is smaller than recommended by the TSA, and the required number of checkpoint lanes is expected to increase from two to three within the next five years. A fourth lane may be required near the end of the planning period, though new technology is likely to increase throughput rates. Other issues identified for the checkpoint include the following:

- **The existing checkpoint queuing area meanders and can interfere with access to the non-secure restaurant/bar and circulation areas.**
- **The checkpoint lanes have a 45-degree turn, which reduces passenger flow.**
- **The composure area impinges on the circulation area.**
- **Expansion/reconfiguration phasing will be challenging due to physical constraints.**
- **The adjacent non-secure restaurant/lounge is like to be affected by expansion/reconfiguration of the checkpoint.**

Secure Area

The demand for secure space will exceed the existing amount of area within the next five years. Specific opportunities and constraints were identified for each of the concourses as described below.

CONCOURSE B

- **Ground boarding at this concourse allows flexibility in aircraft parking and passenger loading/unloading. However, the hold room does not have sufficient capacity for current usage.**
- **The hold room does not have easy access to passenger concessions.**
- **Recommended changes to the security checkpoint will affect expansion to Concourse B.**

CONCOURSE C

- **Hold rooms are full for many flights.**
- **Hold rooms for Gates C1 and C2 are small for today's aircraft, holding about 65 passengers each. Hold rooms for future jet bridge gates should be design for "design aircraft" capacity.**
- **The circulation corridor is narrow, especially near Gates C1 and C2**
- **The restaurant fills quickly during peak activity hours.**
- **Gate C1 is difficult for aircraft to access.**

Passenger Boarding Bridges

A gate capacity analysis was prepared for the purpose of providing information on improving performance at the C gates and holdrooms, and for assessing the role of ground boarding in the future. Using the historical and forecasted daily departures per gate, the analysis found that Concourse C currently requires one additional passenger boarding bridge and will require eight total boarding bridges within the 20-year planning period. The analysis also recommends that the future concourse layout allow for continued, limited use of ground boarding at Concourse B, and that the design of several parking positions allow for access by narrow-body jets (A320, B737, MD-83).

Terminal Space/Capacity Assessment Summary

Based on the space assessment described above, the Master Plan makes the following general recommendations for functional areas and layouts within and surrounding the terminal building.

1. **Curbside and Public Entries.** Provide more space around the building entries, and make crosswalks and entries more visible.
2. **Wayfinding.** Improve passenger wayfinding inside the terminal and at the curbside.
3. **Restroom.** Refurbish and remodel the restrooms.
4. **Amenities.** Relocate amenities and group them by function.
5. **Security Checkpoint.** Expand its overall area, and allow expansion to three lanes in the future.
6. **Circulation.** Improve vertical circulation from floor to floor, providing options including elevators, prominent staircases, or up-only/down-only escalators. Improve horizontal circulation on the secure side of checkpoint, providing sufficient space and separating enplaning and deplaning passenger paths.
7. **Concourse B.** Continue to provide limited ground boarding capacity.
8. **Concourse C.** Provide more holdroom, circulation, and concession space.
9. **Passenger Boarding Bridges.** Provide two additional passenger boarding bridges within the 20-year planning period, with the option to add four total boarding bridges if demand dictates.

Terminal Building: RECOMMENDED DEVELOPMENT CONCEPTS

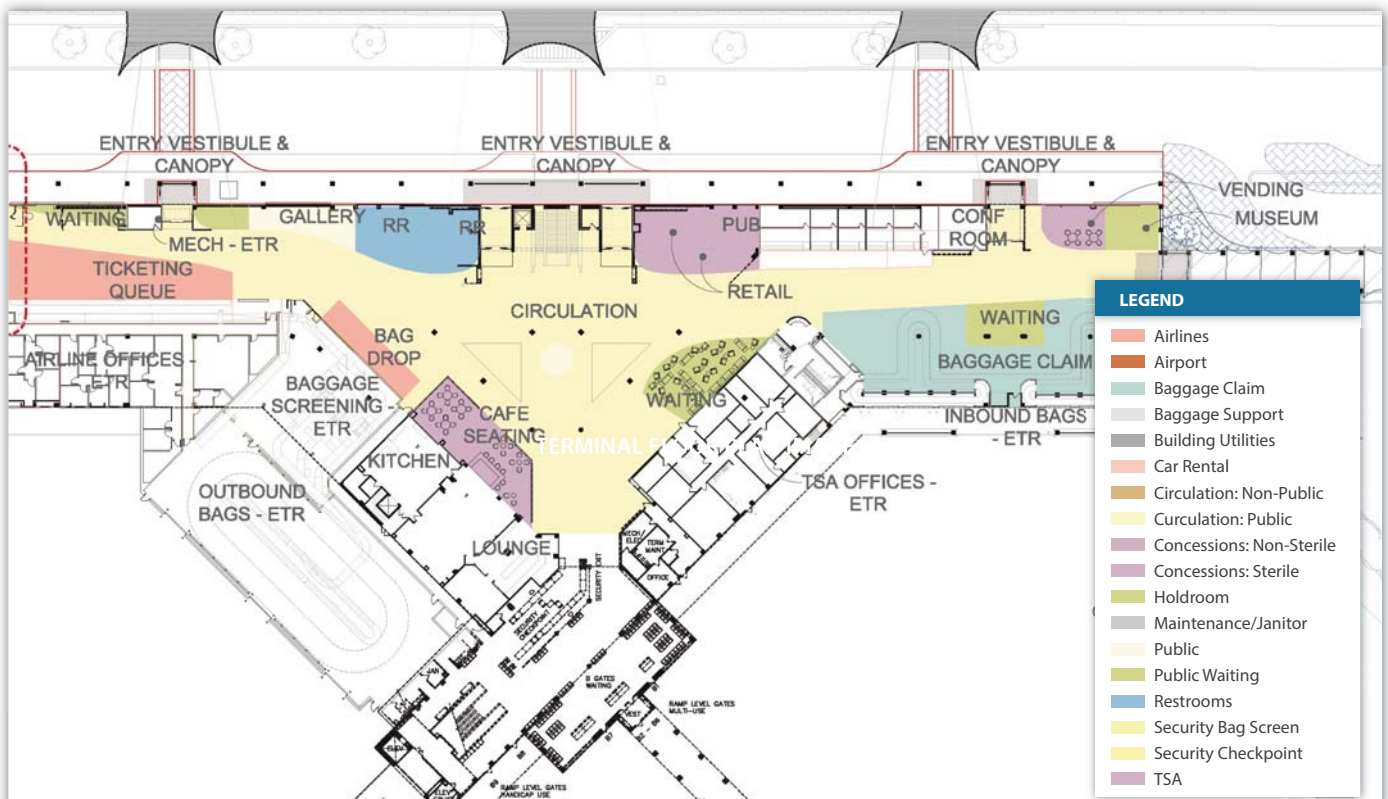
The Master Plan identifies recommended concepts for the terminal curbside, public entries, non-secure area, security checkpoint, and secure area, as described below.

Recommended Concept: Curbside, Public Entries, and Non-Secure Area

Future projects at the curbside should provide visual cues that are visible from a moving vehicle, such as making the crosswalks more visible, making the building entries clearly visible, and making the curbside signage easy to read. The recommended concept for the curbside and entries includes canopies over the entry doors and the stairway connection to the parking area, as well as a way to more clearly define the pick-up/drop-off area and a crosswalk raised above the road surface with contrasting colors. This concept will also allow the Airport to better plan for a parking

structure and curbside on the side of Arthur Collins Parkway opposite the terminal building. A conceptual non-secure area layout developed for the Master Plan, combined with the recommended improvements to the curbside and public entries, is shown below. The conceptual layout for the interior non-secure area includes the following components:

- Relocate amenities to group them by function, including concessions and vending near the baggage claim area, and a set of restrooms with new finishes near ticketing
- Close the existing west entrance and use the area to provide a pedestrian plaza
- Widen the queuing and circulation areas near ticketing.
- Provide new finishes and improve lighting in the public waiting area.
- Move the waiting area closer to checkpoint so that meeters/greeters are not waiting in the circulation area between ticketing and baggage claim.
- Existing car rental and shuttle offices are recommended to remain in existing locations, but new ADA-accessible transaction counters should be provided.
- Near-term renovations should allow for future expansion / renovation at the restaurant and baggage claim area.



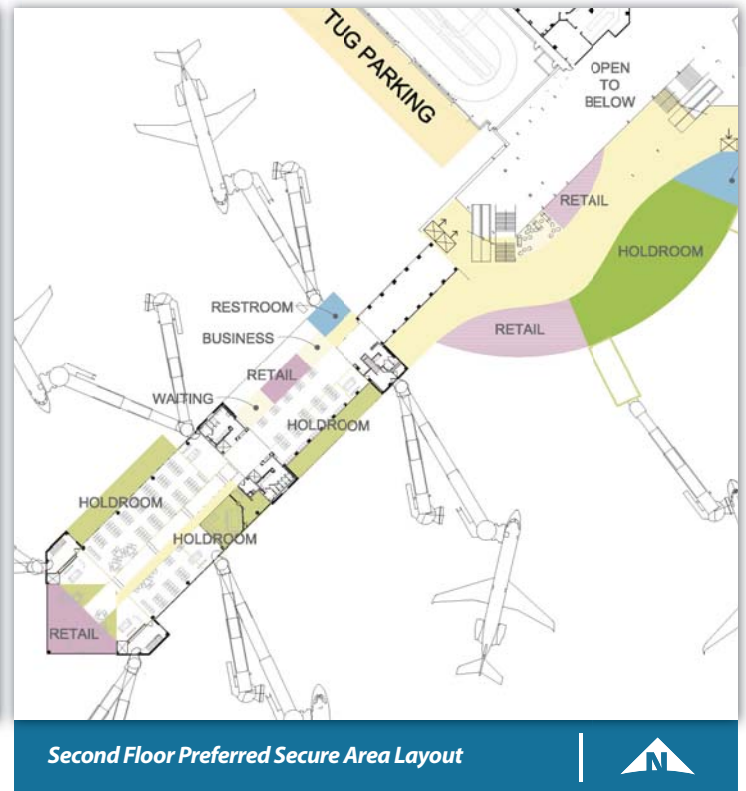
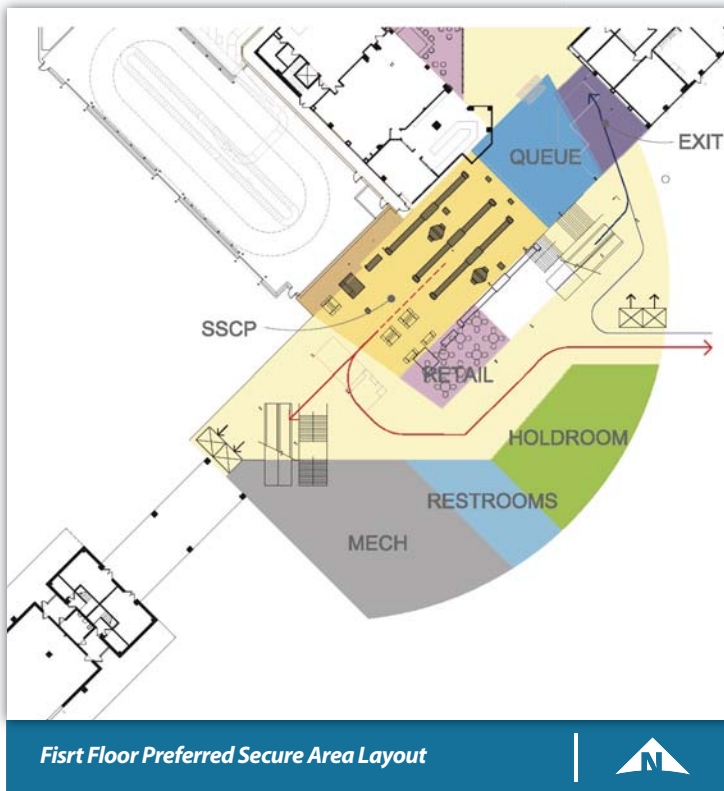
Proposed First Floor Non-Secure Area Layout



Recommended Concept: Security Checkpoint and Secure Area

Conceptual layouts for the security checkpoint and secure areas were developed in stages, and iterative concepts were generated based on continuous discussion with Airport staff. This process resulted in a recommended near-term layout that will provide an expanded security checkpoint; seven total passenger boarding bridges with enhanced parking capability for larger aircraft; expanded hold room capacity; intuitive and unimpeded passenger circulation; and continued ground boarding capability. The first and second floors of this conceptual layout are shown below.

A more generalized long-term layout was also developed that will accommodate the future addition of passenger boarding bridges to Concourse C. This conceptual layout builds on the recommended near-term layout, provides ten total passenger boarding bridges, and allows for associated holdroom, circulation, and concessions space.



Support Facilities

- **ARFF Facilities.** Current ARFF facilities, equipment, and staffing adequately serve the existing and projected runway system and airline operational schedule.
- **SRE/Maintenance Facilities.** The SRE/maintenance facility located southeast of the terminal apron is nearing storage capacity, and potential expansion of the facility is limited due to its architectural and structural design and location near the terminal apron and Runway 9/27. There is currently space to the immediate east of the SRE/maintenance building that could accommodate a future ancillary SRE/maintenance facility when future demand dictates. This area should be reserved for future SRE/maintenance use as part of the Airport's development plan.
- **Fuel Storage.** Available aircraft fuel storage includes 80,000 gallons Jet-A and 24,000 gallons 100LL. Fuel storage requirements at the Airport are variable based upon individual supplier and distributor policies. For this reason, future fuel storage requirements will be dependent upon the individual distributors and space should be reserved for the expansion of existing fuel storage facilities as required. However, ample space exists for expansion at the existing fuel farm sites.
- **Aircraft Deicing.** The capacities of the Airport's deicing basins were evaluated to determine whether proposed apron expansions and/or operational changes required for the preferred alternatives will necessitate the expansion of deicing runoff management facilities.

Land Use Plan and Environmental Overview

This chapter of the Master Plan provides general recommendations regarding the future use and development of Airport-owned land, and presents an overview of land uses and known environmentally sensitive areas on and surrounding the Airport. The intent is to identify potential environmental and land use issues associated with the recommended development plan.

Airport Land Use Plan

After selection of the preferred airside alternatives for the Master Plan, landside areas on Airport property were classified according to recommended long-term landside function. These functional classifications include Terminal Development, Aviation Related Development, Non-Aviation Related Development, and Airport Support. Protecting areas for these land uses will help the Airport achieve its long-term goals and objectives. Total acreages for each functional classification are summarized in the table below. The Master Plan recommends specific land uses for the Terminal Development, Aviation Related Development, and Airport Support functional areas. Potential Non-Aviation Related Development land uses were identified by a Real Estate Market Study conducted for the Master Plan.

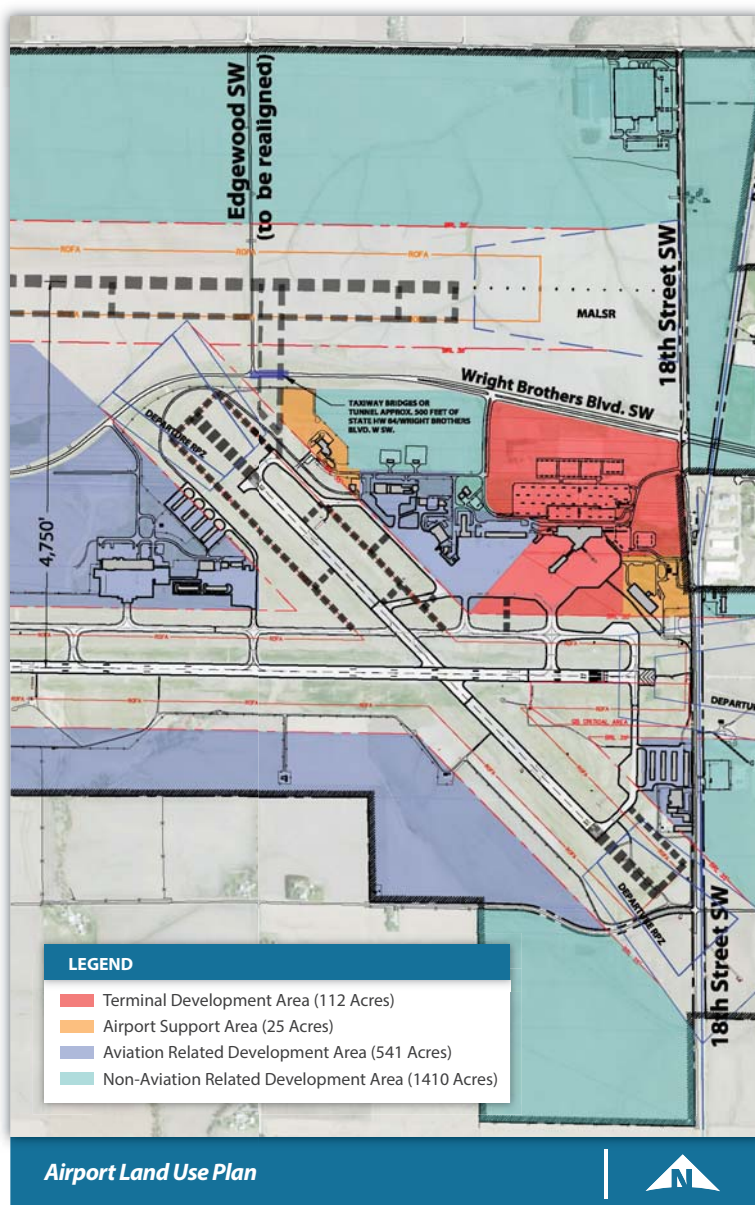
Long-Term Land Use Plan Functional Areas

Land Use	Acreage
Terminal Development	112 acres
Aviation Related Development	556 acres
Non-Aviation Related Development	1,312 acres
Airport Support	25 acres

Environmental Overview

This overview identifies potential environmental issues that will need to be addressed as the Airport moves forward with implementation of the recommended development plan. Any federal action would require completion of the National Environmental Policy Act (NEPA) process. The NEPA process would identify required permits and mitigation activities. The Master Plan provides an overview of the following resources on and in the vicinity of the Airport, among others.

- Land Use Controls and Zoning
- Compatible Land Use
- Threatened and Endangered Species
- Architectural Resources
- Archaeological Resources



Financial Analysis

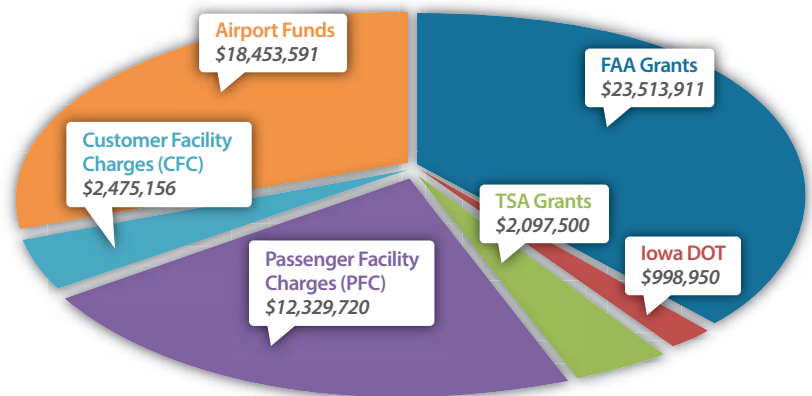
This chapter of the Master Plan includes an overview of the Airport's financial and ownership structure; presents a pro forma cash flow analysis for FY2013-2018 based on trends in Airport revenue and expense levels, and the Master Plan Forecasts; and assesses the financial feasibility of the Airport's Capital Improvement Program (CIP), including identification of potential funding sources.

The Airport is owned by the City of Cedar Rapids (City) and is considered an Enterprise Fund of the City. The Cedar Rapids Airport Commission (Commission) is a policy-making body, which oversees Airport management and consists of five Commissioners appointed to three-year terms by the Mayor and approved by the City Council. The accounting and financial reporting policies of the Commission conform to accounting principles for local government units as set forth by the Governmental Accounting Standards Board. Seven cost centers are included in the financial reporting structure for the Airport, of which five are direct (airfield, terminal, cargo, general aviation, and other) and two are indirect (administration and safety/security). The Airport is self-sufficient in that it does not rely on local government tax revenues to fund expenses related to operations, maintenance, or capital improvements. The Airport's FY2013-2018 CIP includes many projects identified in the Master Plan that are necessary to enhance aviation safety, increase airport capacity, and maintain existing facilities. Total funding required for the six-year CIP is approximately

\$61.5 million. The financial feasibility of future projects is dependent on the provisions of existing and future leases, funding levels and participation rates of federal grant programs, the availability of passenger facility charge (PFC) and customer facility charge (CFC) revenues, bonding capacity, and the ability to generate internal cash flow from Airport operations. A funding scenario was developed for each project from the following sources, and a projected breakdown of the total CIP funding source allocations are shown in Chart below:

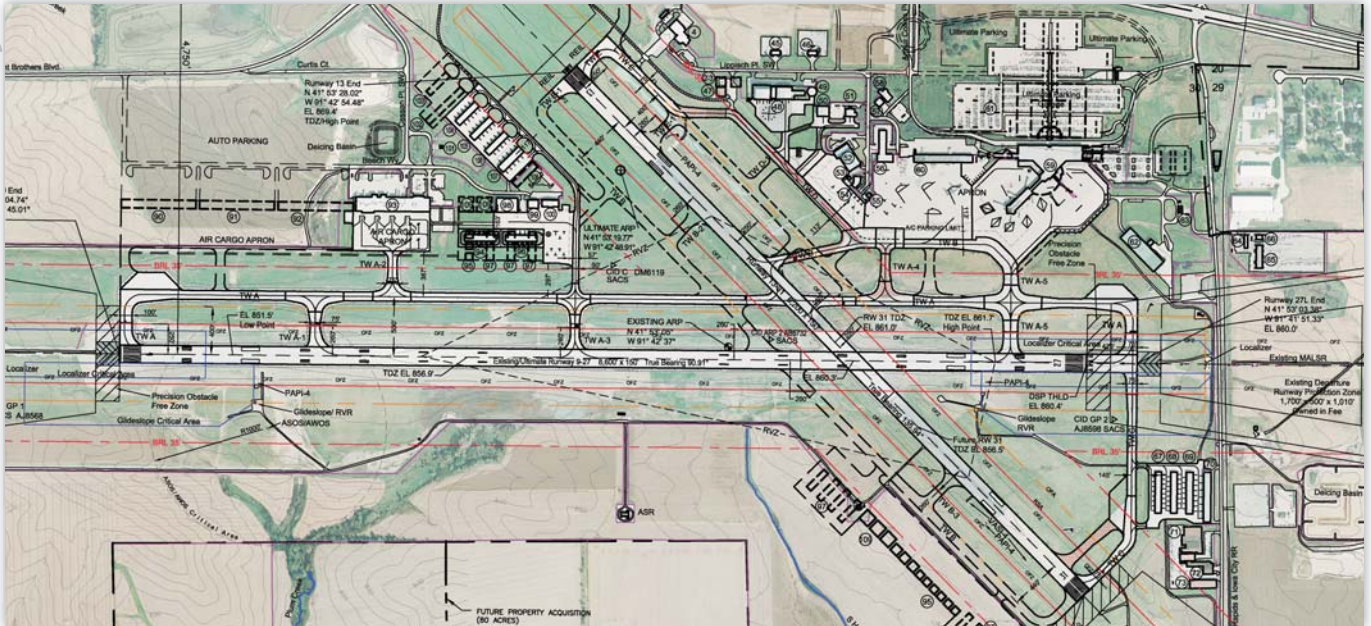
- **FAA Airport Improvement Program (AIP) entitlement and discretionary grants**
Funded by federal taxes on aviation fuel and airline passenger tickets
- **Federal Transportation Security Administration (TSA) grants**
Funded by the American Recovery and Reinvestment Act of 2009
- **Iowa DOT Airport Improvement and Vertical Infrastructure Program grants**
Funded by the Iowa Transportation Commission
- **Passenger Facility Charges (PFCs)**
Funded by Airport fees on airline passenger ticket transactions
- **Customer Facility Charges (CFCs)**
Funded by Airport fees on rental car customer transactions
- **Airport Funds**
Funded by airline revenues, terminal concessions, ground and facility leases, fuel flowage fees, landing fees, ramp fees, and parking revenue

FY2013-2018 Capital Improvement Program Funding Sources (estimated)



As shown in the chart above, Airport funds account for approximately \$18.5 million, or 31%, of the CIP funding scenario. Typically, Airport revenues are used to cover operations and maintenance expenses along with debt service obligations. However, any surplus revenues can be applied directly to Airport projects. Based on the pro forma cash flow analysis completed for the Master Plan, annual Airport fund balances during FY2013-2018 are expected to be well in excess of the amounts required to fund the CIP. The financial analysis assumes that all of the local funding requirement will be funded from Airport revenues; however, the Commission may consider issuing bonds to distribute the costs over multiple years.

Airport Layout Plan Update



Existing Airport Layout Drawing (ALD)

A focused Airport Layout Plan (ALP) update was completed that incorporates changes resulting from the preferred concepts presented in the Master Plan. An ALP is a blueprint for airport development that depicts existing airport facilities and proposed improvements, and must be kept up-to-date at all times.

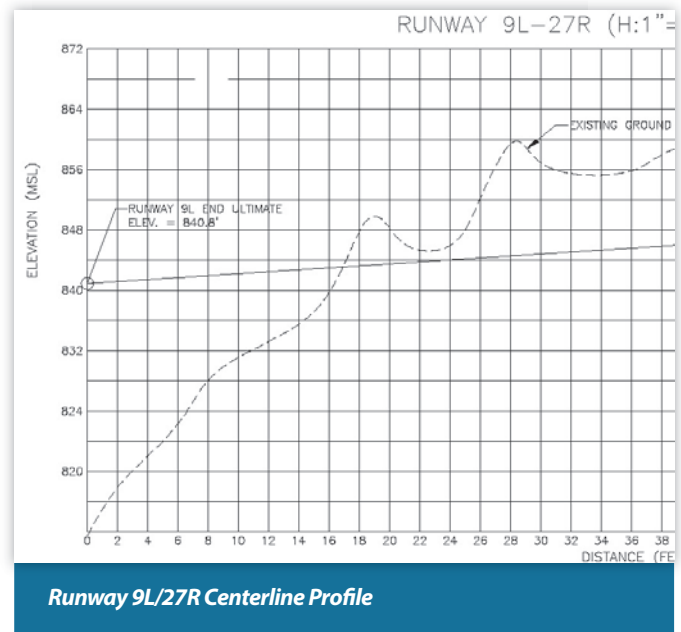
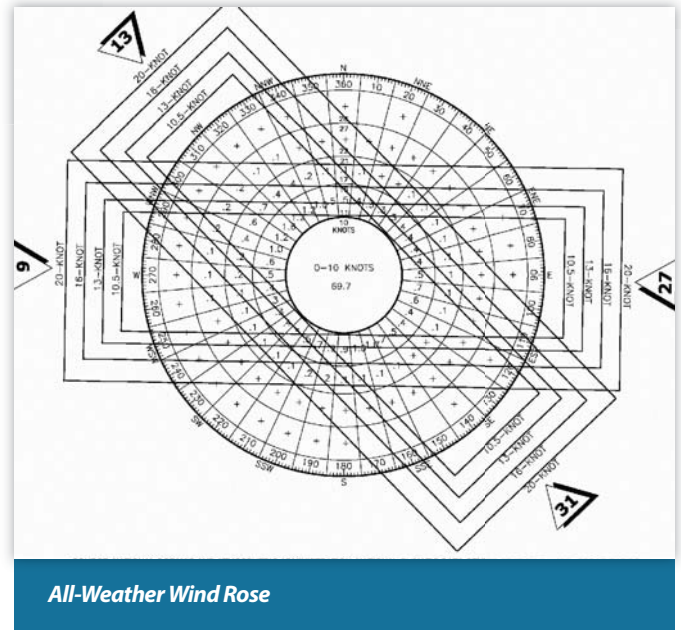
The five primary functions of an ALP, as defined by the FAA, are as follows:

1. An FAA-approved ALP is necessary for the airport to receive federal financial assistance and collect passenger facility charges.
2. An ALP helps the airport sponsor ensure that airport design standards and safety requirements are maintained, and that proposed development is consistent with airport and community land use plans.
3. An ALP serves as a public record of aeronautical requirements both present and future, and as a reference for community deliberations on land use proposals and budget resource planning.
4. An ALP allows the FAA to plan for budgetary, procedural, and airspace needs.
5. An ALP is a working tool for the airport sponsor, including its development and maintenance staff.

Airport Layout

The primary components of an ALP include the following drawings:

- **Airport Layout Drawing and Data Sheet** – Identifies existing and proposed future facilities for the entire Airport property. This drawing includes facility description labels, imaginary surfaces, runway protection zones, runway safety areas, and other basic airport/runway data.
- **Terminal Area Plan Drawings** – Presents large-scale depictions of areas with significant terminal facility development, and is typically an enlargement of the Airport Layout Drawing.
- **Airport Airspace Drawing** – Depicts objects affecting navigable airspace on and surrounding the Airport using criteria contained in Federal regulations and guidance.
- **Approach Surface Drawings** – Presents large-scale depictions of the approach/departure environments surrounding each runway end.
- **Land Use Drawings** – Depicts land uses and zoning designations surrounding the Airport.
- **Airport Property Map** – Depicts the Airport property boundary, the various tracts of land that were acquired to develop the airport, and the method of acquisition.





THE
**EASTERN
IOWA AIRPORT**
CEDAR RAPIDS

2121 Arthur Collins Parkway SW

Cedar Rapids, IA 52404-8952

Phone: 319.362.8336

www.eairport.org



THE EASTERN IOWA AIRPORT CEDAR RAPIDS



This paper contains 100% post consumer fiber, manufactured entirely Carbon Neutral Plus and Processed Chlorine Free. It is Green Seal™ and Forest Stewardship Council™ (FSC) certified ensuring responsible forest management.

Prepared and published by Mead & Hunt, Inc.
Tulsa, Oklahoma, October 2013.

Mead
& Hunt