



COASTAL CAROLINA

Regional Airport



Airport Master Plan Update

Executive Summary



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Introduction

Coastal Carolina Regional Airport (EWN), a public-use, commercial service airport, serves the aviation needs of eastern North Carolina, including the counties of Craven, Pamlico, Carteret, and Jones. EWN is a primary connection to historic New Bern, Marine Corps Air Station Cherry Point and North Carolina's Crystal Coast destinations. EWN's mission is to provide a safe, secure, efficient, and user-friendly airport, committed to bringing the community the highest level of service while delivering a significant economic benefit. Development of this Master Plan allows EWN to continue making systematic upgrades to facilities and infrastructure to meet programmed planning objectives which are certified by the Federal Aviation Administration, required from the Transportation Security Administration and expected by the traveling public.

Overview of Coastal Carolina Regional Airport

EWN History

- Built in 1931 Dedicated as Simmons-Nott Airport
- Served as Marine Corps Training Facility from 1941-1946
- Operated as a Public-Use, Commercial Airport since 1946
- North Carolina's "Eastern Most" Commercial Service Airport
- Originally Managed by New Bern and Craven County
- Independent Airport Authority Created in 1979

EWN Annual Activity

- American Airlines serving Charlotte, NC
- Delta Air Lines serving Atlanta, GA
- 225,000 Airline Passengers
- 40,000 Aircraft Operations
- 1,800 tons of air cargo (2017) 4th highest in State

EWN Annual Economic Impact

- \$363M Economic Output
- 2,125 Jobs Supported
- \$72M Personal Income
- \$12M State and Local Taxes

*Data Based 2019 NCDOT Division of Aviation Annual Economic Impact Study released in 2019

Master Plan Process

The Airport has undertaken an update to their Master Plan (AMPU) to determine future facility needs over the next 20 years. This Plan will serve as the framework for airport management during the programming and financing of all future airport capital projects. The AMPU, as adopted by the Coastal Carolina Regional Airport Authority and accepted by the Federal Aviation Administration (FAA), enables the Airport to justify capital improvements as eligible under federal and state airport grant programs. The timing of these improvements will be coordinated with the FAA and incorporated into the airport's local Capital Improvement Programs (CIP).





Inventory/Existing Conditions

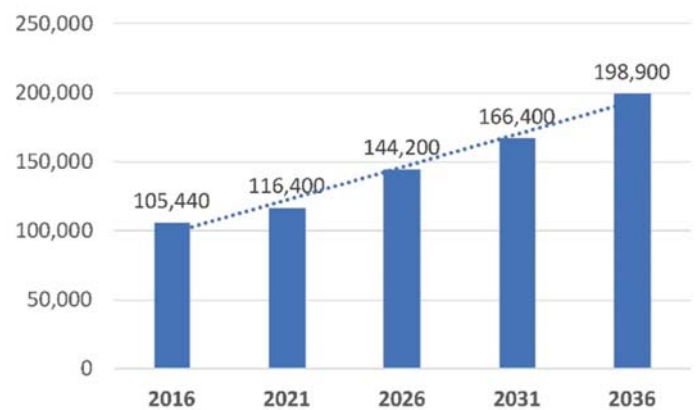
Documenting the existing conditions at EWN establishes a baseline for planning future airport development. EWN is currently recognized by the FAA in their National Plan of Integrated Airport Systems (NPIAS) as a Commercial Service - Primary, Non-Hub Airport. EWN's existing facilities include:

- Airport property consisting of over 700 acres
- Two Intersecting Runways
 - Runway 4-22 (6,453 x 150 ft.)
 - Runway 14-32 (4,000 x 150 ft.)
- Network of taxiways providing access between the runways and the terminal areas
- Air Traffic Control Tower (Federal Contract Tower)
- Fed-Ex Cargo Facility
- Services provided include:
 - Commercial Fixed Base Operator
 - Maintenance Facility
 - Flight School
- General Aviation Hangar Space includes T-hangars, Box Hangars and Corporate Hangars
- Commercial Service Terminal Building
- General Aviation Terminal Building

Forecasts and Critical Aircraft

Forecasting aviation activity is a critical component of the Master Planning process and is required to evaluate future demand at the Airport. Aviation activity forecasts look at passenger enplanements, based aircraft, aircraft operations and cargo volumes over a 20-year period.

Enplanements



This process also defines a Critical Design Aircraft, which is the most demanding type or group of aircraft to operate over 500 times per year at an airport. The Bombardier CRJ-900 is forecasted to become the Critical Design Aircraft for EWN. Using aviation forecasts and the critical aircraft, future facilities are determined. These forecasts are reviewed and approved by the FAA Memphis Airports District Office (ADO) with respect to their rationale and concurrence with industry standards.



Facility Needs and Requirements

The Facility Requirements analysis determines the Airport's capacity and ability to support the projected aviation forecasted demand. Facility requirements identify development, replacement, or modification of airport facilities needed to accommodate the existing and 20-year anticipated demand. The Facility Requirements are a critical element of the Master Planning process, providing justification for improvements that will allow EWN to continue to serve the aviation needs of eastern North Carolina.

The following facility improvements and additions were identified:

Runway 04-22:

- Runway 04-22 Extension to 6,800 feet (including realignment of Williams Road)
- Runway 04-22 Pavement Strengthening
- Install Runway 04 Approach Lighting System

Taxiways:

- Taxiway K Relocation to provide increased separation between runway and taxiway
- Taxiway B Relocation to provide increased separation between runway and taxiway
- Removal of Taxiway F to eliminate "Direct Access" taxiway
- Rehabilitate/Strengthen Various Taxiway Pavements and widen taxiway fillets to meet FAA design standards

General Aviation:

- Construct additional Corporate Box Hangar Space
- Construct additional T-Hangar Space
- Fuel Farm Relocation and Expansion

Commercial Terminal Area:

- Expand Aircraft Parking Apron to accommodate forecast critical aircraft (complete)
- Construct new Aircraft Rescue and Fire Fighting Facility
- Commercial Terminal Expansion and Renovation
- Jet Bridge Installation
- Rental Car Quick Turn Around Facility

Other Airport Improvements:

- Realignment of Airline Drive and Terminal Drive (provide two-way traffic)
- Construct New/Relocated Air Traffic Control Tower
- Aerospace Corporate Development
- Air Cargo Facility Expansion
- New Airfield Lighting Vault
- New Airport Maintenance Equipment Storage Facility
- New Snow Equipment Storage Facility



Capital Improvement Program & Project Funding

The Capital Improvement Program (CIP) provides EWN with a systematic approach to implement and fund the improvements required to accommodate the forecast demand. The CIP provides a chronological order for development, dividing the projects into three “Phases”. The thirty-four projects identified for EWN are depicted on pages 4 and 5 including the “Phase” the improvements are planned for implementation.

Larger projects, such as the extension of Runway 04-22, are phased over multiple years to systematically accomplish each element of the project and allow EWN to program the funding for the project over multiple years. For instance, phasing of the Runway Extension project will include:

1. **Complete Environmental Documentation**
2. **Land Acquisition**
3. **Williams Road Realignment**
4. **Runway Safety Area Grading and Localizer Antenna Relocation**
5. **Strengthen Runway 04-22**
6. **Install Runway 04 MALSR**
7. **347-foot Runway/Taxiway Extension**



Project Funding

Planning level cost estimates were developed for each project identified in the CIP. Using the preliminary cost information, a funding plan was developed to identify eligibility of projects and potential funding sources allowing EWN to plan local funds necessary to accomplish the needed improvement.



Most of the projects at EWN are funded by the FAA’s Airport Improvement Program (AIP), where revenue is derived from user fees funding the Federal Airport and Airway Trust Fund. The airport sponsor is responsible for funding a local 10 percent match, which is typically taken from airport revenue, Passenger Facility Charges or other funding sources, including state airport funds.

Proposed Terminal Area Development

The existing terminal building at EWN was constructed in 1999 and provides approximately 40,380 square feet of space including the following functions:

- Serves two air carriers, American Airlines & Delta Airlines with three ground boarded gates
- Airport Administrative offices
- Rental Car Facilities
- Transportation Security Administration offices
- Airport Operations, Airport Rescue and Fire Fighting equipment and personnel

The locations and sizes of the functional areas associated with this type of building are typical of the industry and typical of building designs prior to 9/11 security requirements. In addition to increased passenger enplanements, airlines have been transitioning from the use of turboprop and smaller regional jets to larger 70 to 90 seat regional jets as recently seen at EWN. Terminal facilities must be expanded to meet the forecast demand and increased number of passengers during peak throughput periods. Improvements must also be made to accommodate the function and space requirements for passenger and baggage screening implemented after 9/11.

Terminal expansion and improvements include:

- Constructing a new dedicated Aircraft Rescue and Fire Fighting (ARFF) Facility
- Security Checkpoint renovations including additional passenger queuing space
- Passenger Hold Room renovation and expansion including ability to serve future passenger boarding bridges
- Improvements to baggage claim area
- Ticketing lobby expansion and renovations



Proposed Aircraft Rescue and Fire Fighting Facility



Road Re-alignment (Williams Rd. & Terminal Dr.) and Runway Extension



Coastal Carolina Regional Airport Runway 04 currently has a declared length of only 6,053 feet, affecting its usable length for large aircraft performance and safety considerations. The airline industry is transitioning to larger regional aircraft and it has been determined that a 6,800-foot runway length is required to meet the performance requirements of the new Critical Design Aircraft designated in this plan (CRJ900). The current runway length at EWN is not only the shortest of all commercial airports in NC but it also falls short of the current published statewide planning objective. A runway extension will require a realignment of Williams Road to move it outside of the future Runway Object Free Area and allow for relocation of the existing FAA localizer antenna. The project would involve mitigation for impacts to Scott's Creek beyond the end of the runway to provide an improved Runway Safety Area.



This road realignment project will allow the runway to be extended to an ultimate length of 6,800 feet - a length that is essential for EWN to continue to safely and efficiently serve current and future commercial air traffic. Additionally, road improvements to permit two-way traffic to by-pass the passenger terminal on Terminal Drive are included in this proposal. Together these road improvements are critical to allow the airport to function as a safe and viable option by the traveling public, now and into the future.



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