

EXECUTIVE SUMMARY

Dare County Regional Airport (MQI)
2005 Airport Master Plan Update

THE Airport Master Plan Update for the Dare County Regional Airport identifies the types and timing of needed improvements over a 20-year planning period. It serves as the Airport's master planning document, which enables application for improvements eligible under the federal and state airport-aid-programs.

AIRPORT ROLE / IMPACT

THE Airport is a 'Red' group facility as classified by the NCDOT, Division of Aviation, which is the highest tier of general aviation airport in North Carolina.

In terms of economic significance, the Dare County Regional Airport contributes \$16.2 million per year in spending impacts. On and off-airport impacts by turboprops and business jet passengers are most profound, averaging \$2,000 to \$4,400 per flight - twice the impact reported for the average visitor to the Outer Banks.

EXISTING & FUTURE AIRPORT ACTIVITY

Over the next 20-years, Airport activity is expect to grow 3% to 5% annually, increasing to 110 based aircraft and 64,000 annual aircraft operations – in which jet traffic would grow to about 8% of the Airports flights. In fact, one or more based jets are likely with an extension of the runway beyond 4,300'.

AT present, the Airport has 62 based aircraft and experiences about 23,000 general aviation flights per year. Of this, 800 operations are by business jets – exceptional for only a 4,300' runway. Nevertheless, the current *demand* for jet access to Dare County is around 2,500 annual operations.

Business jets are the fastest-growing segment of the general aviation industry. In spite of this, the existing 4,300' take-off length excludes about 60% of the business jet fleet from operating at the Dare County Regional Airport- at near full potential.

BUSINESS JET ACTIVITY IMPACTS

Being able to reliably accommodate the larger-cabin jets translates into a jump in Airport revenues, and supports the nearly 8% of visitors dependent on commercial air travel from emerging Outer Banks tourist markets. However, with a 4,300' runway, the Dare County Regional Airport is strained to capitalize, or significantly promote this growth.

OF the 10,000+ jets in the United States, half are based in states within the 'primary' and 'emerging' Dare County/Outer Banks tourist markets. Using FAA data and takeoff length calculations, a 5,000' length provides sufficient take-off distance for about 65% of the jet fleet, while 5,500' captures nearly 95% of the fleet. In just 5 years, by 2010, this unmet 'jet' demand equates to over \$500,000 in foregone Airport 'profits' lost from Jet-A fuel sales and other jet revenues.

ADDITIONAL runway length enables the Airport to attract 'first-time' and 'repeat' visitors from more distance emerging markets, which expands the non-peak shoulder season experienced by the Airport, which is also in-step with desired Outer Banks tourist growth strategies.

MAJOR AIRPORT ISSUES / DEFICIENCIES

PRECISION approach capabilities, which typically coincides with a jet-runway length, is restricted for Runway 5-23 by extensive military airspace surrounding the Airport, and is not allowed to Runway 17-35 because of inadequate length. This situation could be improved in the future with the installation of a military radar proposed in the region, and/or FAA improvements currently programmed to the existing GPS satellite-based navigational system.

THE Dare County/Outer Banks market is estimated to generate 110,000 passengers a year with potential service from the Dare County Regional Airport. A 5,000' to 5,500' runway length, and precision approach capabilities are crucial for securing reliable airline service.

AIRPORT FACILITY NEEDS

AIRPORT facility needs primarily revolve around future property acquisition, runway extensions, taxiway improvements, apron expansion and hangar capacity.

PREFERRED AIRPORT DEVELOPMENT PLAN

Option 'J' was selected by the Airport Authority as the preferred airfield plan, which entails a 700' extension of Runway 5-23 to 5,000' (100' on the Runway 23 end and 600' to the Runway 5 End). It should be noted that the 5,500' length is an ultimate planning goal, but not pursued as part of the 2005 Airport Master Plan Update.

A two-phase improvement is ultimately planned for the crosswind Runway 17-35. First, to restore the 1,300' of existing displaced thresholds. Second is to extend the take-off distance available in both directions, which is important for critical decision speeds required of twin-engine aircraft.

Option 'B' was selected by the Airport Authority as the preferred terminal area plan, which meets the 20-year demand for apron and hangar space. This option entails eventual relocation of the TVOR station to the southwest portion of the Airport.

OPTIONS 'J' AND 'B' have been carried-forward as part of the MQI Airport Development Plan cost estimates and depicted on the updated MQI Airport Layout Plan (ALP) drawings.

ESTIMATED DEVELOPMENT COSTS

THE 10-year development program includes the following major projects: ■ Approach clearing for the Runway 23 instrument approach, ■ Runway 5-23 extension to 5,000', ■ Install localizer for Runway 5 non-precision approach ■ Restoring 1,300' of displaced threshold on Runway 17-35, ■ Relocate the TVOR Station, ■ Parallel taxiway section for Runway 17-35, ■ Airfield and terminal area pavement rehabilitation/overlay, ■ Apron expansion, and ■ New hangar construction on north and southside terminal areas.

THE 10-year project costs are estimated at \$26.2 million. Nearly 9.6 million is for property acquisition rights and relocations. About \$4.8 million is expected to be paid by tenants, or other third-party users; primarily for hangar construction – as demand warrants.