

PURPOSE AND NEED FOR THE PROPOSED FEDERAL ACTION

This Environmental Assessment (EA) is prepared pursuant to the National Environmental Policy Act (NEPA) in accordance with the requirements of Federal Aviation Administration (FAA) Order 5050.4B, *The Airport Environmental Handbook*; and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*. It further complies with the State of Maryland's environmental regulations, and applicable Carroll County, Maryland, rules and regulations. This EA analyzes and discloses the impacts associated with development from the 2007 Master Plan (MP) Update for the Carroll County Regional Airport (DMW).

This chapter specifies the underlying purpose and need for the proposed airport projects in accordance with the Council on Environmental Quality Regulations, Section 1502.13, and consists of the following sections:

Airport Setting and Background – This section provides an overview of DMW's physical setting, history and role in the aviation community.

Description of the Proposed Action – This section identifies the purpose and description of the development projects included in the proposed action.

Project Background – The underlying need for the proposed development program related to the airport's role in promoting regional economic development is described in this text. It further illustrates the operational requirements of DMW, and summarizes the twenty year forecast of aviation activity resulting from this role.

Purpose and Need for the Proposed Federal Action – The relationship between the proposed improvements and the efficiency, safety, and forecasted demand at DMW is established in this section. Following a brief overview of DMW and its facilities, this section describes the need for the development projects included in the proposed action.



A. AIRPORT SETTING AND BACKGROUND

DMW is a general aviation facility located approximately three miles north of the City of Westminster, in Carroll County, Maryland. The county is located in the northwest quadrant of the Baltimore/Washington D.C. Metropolitan Area and is within the Baltimore Standard Metropolitan Statistical Area. The DMW Master Plan (MP) Update, approved December 2007, projects 112,739 general aviation (GA) operations for the base year 2005 and forecasts a steady increase in operations to approximately 203,619 by 2025.

The FAA is required to publish the National Plan of Integrated Airport Systems (NPIAS) as mandated by the Airport and Airways Improvement Act of 1982. DMW is identified in this plan as a general aviation (GA) reliever airport for Baltimore-Washington International Airport (BWI). The NPIAS is FAA's planning system that is updated every two years and is intended to identify the nation's airport needs over a 10-year planning period, representing a continuous planning effort.

The DMW Master Plan Update (2007) recommended the Airport Reference Code (ARC) for DMW conform to ARC C-III design standards based on the documented critical aircraft. The ARC is based on the fleet mix of aircraft utilizing the airport on a regular basis, with the aircraft approach category of 'C' determined by approach speed, and the airplane design group of 'III' determined by the wing span. The Gulfstream V has been identified as the critical C-III aircraft for DMW.

B. DESCRIPTION OF THE SPONSOR'S PROPOSED ACTION

This EA addresses projects that collectively enhance DMW's ability to meet forecasted growth and improve its safety and efficiency. Together, the projects are defined as the proposed action in this EA.



The proposed action includes improvements necessary to develop DMW as an ARC C-III general aviation airport as well as meet standards established in Advisory Circular (AC) 150/5300-13, *Airport Design* to the greatest extent practicable, and in accordance with FAA guidance. These projects are included in the airport's five-year Airport Capital Improvement Program (ACIP) with respect to land requirements, Part 77 surface protection, and facility development.

The proposed action includes achieving a total runway length of 6,400' and a full parallel taxiway. The runway length is proposed to meet recommendations for GA airports designated as relievers to commercial service airports, and to allow DMW to accommodate current and future demand. Projects associated with the runway development include:

- Construct associated taxiway system
- Construct standard Runway Safety Area (RSA)
- Install instrument landing system and associated lighting (MALSR, glide slope, localizer, REILs, PAPIs, Windcones)

Additional projects associated with the proposed action include:

- Property Interest Acquisition (easement and fee simple)
- Obstruction Removal (on and off airport property)
- Relocation or closure of Pinch Valley Road
- Realignment of Meadow Branch Road
- Construct Conventional Hangars and T-hangars
- Relocate/shift Fuel Farm

C. PROJECT BACKGROUND

1. Master Plan Update

The 2007 DMW MP Update recommends that the airport be developed to a C-III



facility during the planning period (2005-2025). The future C-III critical aircraft is represented by the Gulfstream V business jet.

The projects described herein are necessary in order for DMW to ensure the safety of the flying public while at the same time meet the performance requirements for the critical aircraft expected to utilize this facility. Several of the identified projects have specific environmental impacts, which are fully defined and evaluated in this report. In addition, the degree of these impacts as well as the potential mitigation measures is submitted for review and consideration. The purpose and need for the proposed action is discussed in detail in Section D of this chapter. Chapter 2 evaluates alternatives for the proposed action.

2. Aviation Demand Forecasts

The forecast of aeronautical activity at DMW during the 20-year planning period (2005-2025), as defined in the MP Update, is a key element of the planning process. The FAA-approved forecast established the basis for determining and planning the airfield infrastructure and facility requirements necessary to adequately serve the community's current and future aviation needs.

Forecast data used for the purposes of this EA are detailed in **Table 1-1**. As shown, these forecasts indicate that all aspects of aviation demand at DMW will experience moderate growth during the planning period. The on-going development projects identified in this plan will enable DMW to continue to accommodate the growth in aviation demand as well contribute to the economic vitality of the service area. The forecast established the basis for determining and planning the airfield infrastructure and facility requirements necessary to adequately serve the community's current and future needs.



The MP Update determined facility requirements based upon existing and forecasted aviation demand. The requirements are needed to satisfy the increasing short-term and long-term aviation needs of the community. The MP identifies all development throughout the 20-year planning period. The proposed improvements were then planned over three development phases, Phase I (2005-2010), Phase II (2011-2015), and Phase III (2016-2025).

**Table 1-1
Carroll County Regional Airport
Airport Operations Data and Forecasts**

FORECAST ELEMENT	BASE	FORECAST YEARS		
	2005	2010	2015	2025
Total Based Aircraft	131	143	151	171
Single Engine	110	114	117	122
Multi-Engine	11	13	15	20
Jet Engine	4	9	10	15
Turbo Prop	4	5	7	12
Rotorcraft	2	2	2	2
Operations	112,739	130,695	151,512	203,619
Design Peak Hour	30	35	40	54
Total Instrument	8,680	10,063	11,666	15,678

Source: 2007 Master Plan Update, URS Corporation.

D. PURPOSE AND NEED FOR THE PROPOSED FEDERAL ACTION

The purpose of the proposed action is to provide sufficient airfield infrastructure at DMW to support the current and projected demand for aviation activity in the greater Carroll County, Maryland region, and also as a GA reliever airport for BWI. The proposed action includes construction of a 6,400' runway and associated parallel taxiway, installation of visual and navigational aids, and related elements required to meet FAA design standards. The runway extension and associated projects will fulfill existing and projected aviation demands, as well as accomplish the facility requirements defined in the 2007 MP Update.

