

BRADLEY INTERNATIONAL AIRPORT EXECUTIVE SUMMARY



MARCH 2019

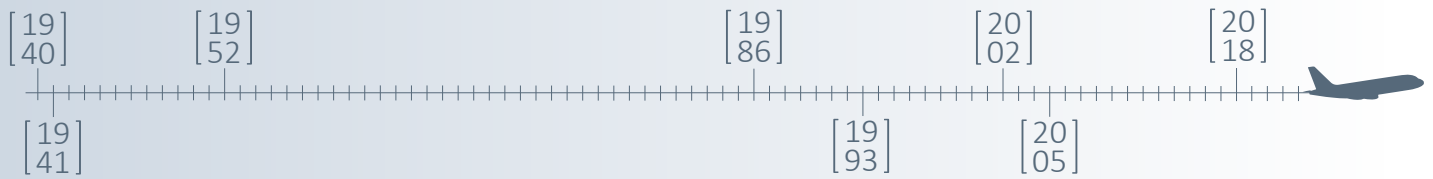


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INTRODUCTION

Airport master planning is a systematic process that evaluates existing facility and aviation market conditions, identifies anticipated requirements and formulates both near- and long-term development strategies. The results of the Master Plan Update provide the guidance necessary for Connecticut Airport Authority to address the need for, and improvements of airport facilities at **Bradley International Airport (BDL)** considerations for the next 20 years.



AIRPORT HISTORY

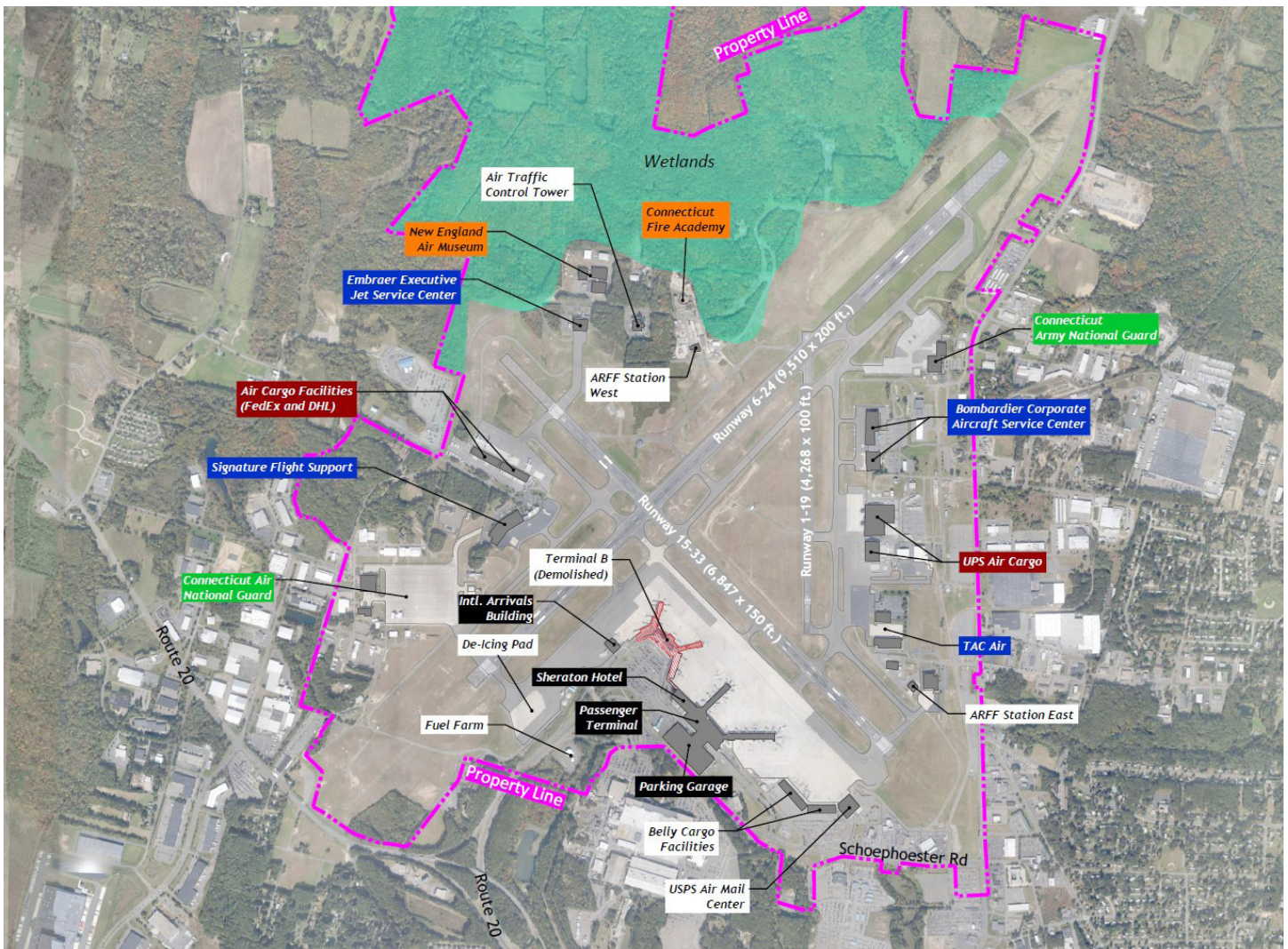
In **1940**, the State of Connecticut acquired 2,000 acres of land primarily in the Town of Windsor Locks, which ultimately would become Bradley International Airport. The following year, the land was transferred to the United States Army and the airfield was used for training pilots during World War 2. The airfield was named for Lieutenant Eugene M. Bradley who was killed during a training exercise in **1941**. Following the war, scheduled passenger service was relocated to BDL from the downtown-located Hartford-Brainard Airport. The State reclaimed the Airport from the federal government the following year, as operations began to expand.

The first terminal facility (later named the Murphy Terminal) went into service in **1952** to support the Airport's growing demand. The following two decades ushered in a period of rapid growth and modernization for the Airport. The current passenger terminal (Terminal A) and the Bradley Sheraton Hotel opened together in **1986**. Following a **1993** Master Plan Study, Terminal A was expanded and modernized by **2002**,

along with the addition of the current International Arrivals Building. The most recent Master Plan Study was completed in **2005**, which resulted in the demolition of the Murphy Terminal and operations being centralized in Terminal A.

Today, Bradley International Airport is situated in the Town of Windsor Locks (Hartford County), with portions of the Airport extending into the Towns of East Granby, Windsor, and Suffield. The Air Traffic Control Tower oversees the three runways that serve nine airlines, including the four major airlines, three discount/low cost airlines, and two foreign carriers. Other key elements include the Connecticut Air National Guard, the Connecticut Army National Guard, UPS, FedEx, DNL, Signature Flight Support, and TAC Air. In addition to aviation use, Bradley International Airport is also home to the New England Air Museum, as well as the Connecticut Fire Academy. The Airport is currently the second-largest and second-busiest airport in New England after Boston-Logan.





Various facilities are used to ensure that the Airport operates smoothly:

- Airfield
 - Runway & Taxiway System
 - Aircraft Parking Aprons
 - Navigational and Lighting Aids
- Passenger Terminal Building
- Automobile Parking and Access
- Air Cargo Facilities
- General Aviation Facilities
- Military Facilities
- Non-Aeronautical Facilities
- Airspace Environment
- Meteorological Conditions
- Support Facilities
 - Aircraft Fueling
 - Aircraft Rescue and Fire Fighting (ARFF)
 - Snow and Ice Control

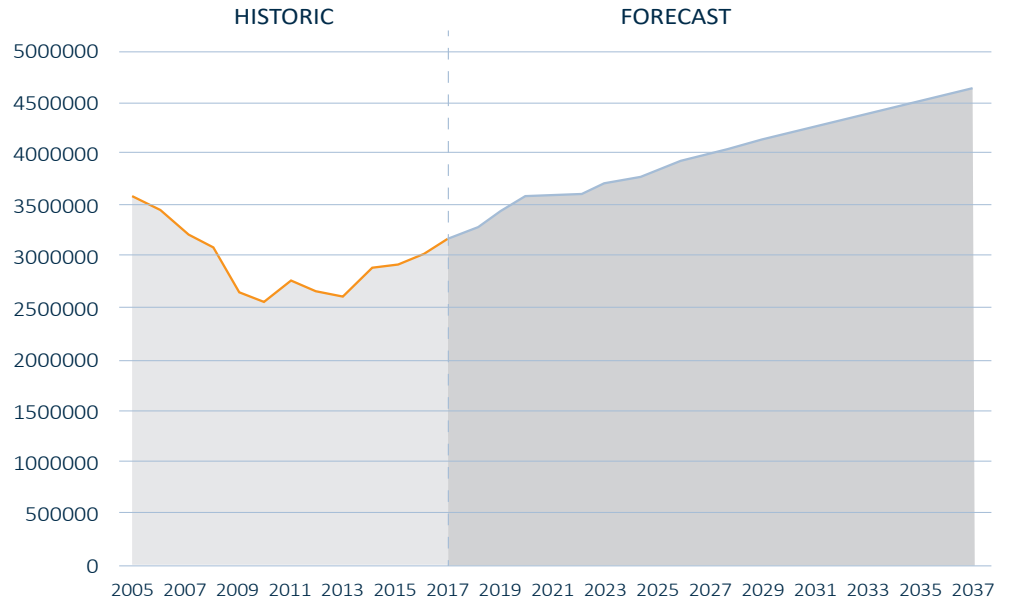


FORECAST OF AVIATION DEMAND

One of the most important steps in the master plan process is forecasting aviation activity. Various sources of information are used to predict aviation demand, helping to identify future facility requirements to better serve passengers. The two key components of the aviation demand are projected enplanements and operations. **Enplanements are defined as the number of passengers boarding a departing plane.** In 2017, there were 3.21 million enplanements at BDL, which is forecast to grow to 4.65 million by 2037. **Operations are defined as the number of arriving and departing flights.** BDL had 67,500 airline operations in 2017 and is expected to increase to 87,700 by 2037. These enplanements and operations are currently conducted by nine airlines covering 34 non-stop destinations. Total airport operations, with general aviation, cargo and military flight, included over 99,000 operations in 2017, and a forecast of 128,000 by 2037.

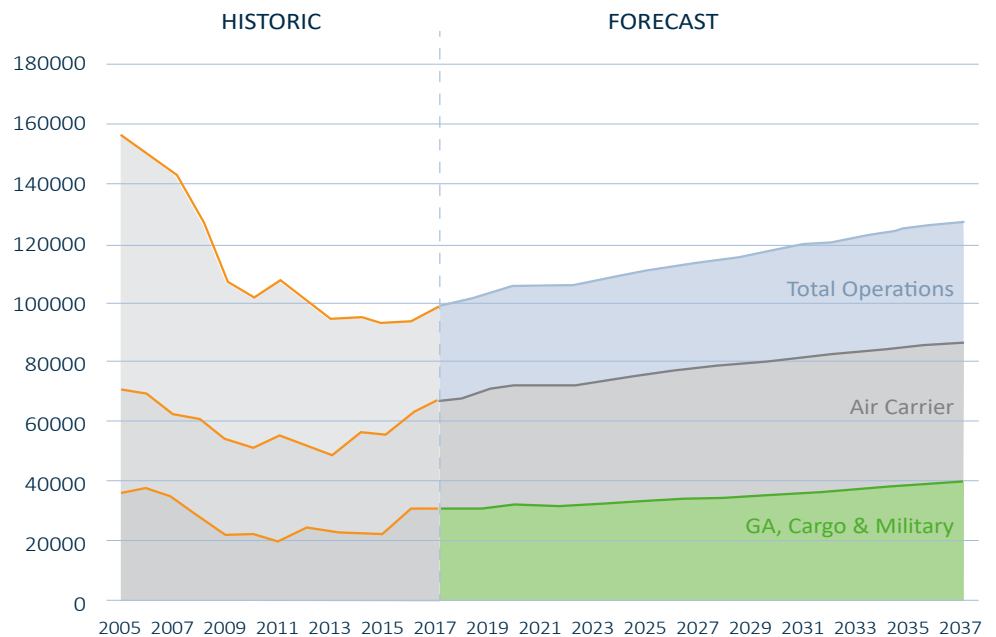
Enplanement Forecast

Total annual number of passenger boardings



Operation Forecast

Total annual number of takeoff and landings





FACILITY REQUIREMENTS

In order to ensure that BDL is capable of supporting the expected increase in passenger traffic, the following facility requirements were identified in the Master Plan to adequately accommodate existing and anticipated activity levels.

- Airfield
 - Full-parallel taxiways (both sides of runways)
 - Closure of Runway 1-19
 - Extend Runway 15-33 to 7,600'
 - Address non-standard airfield conditions
 - Improvements to Taxiways (G, H, K, etc.)
 - Expansion of Deicing Apron
- Terminal Building
 - Development of Ground Transportation Center (GTC)
 - Additional aircraft gates
 - Additional capacity for security screening, baggage screening, hold rooms, concessions, integrated Federal Inspection Services (FIS)
 - Expanded Passenger Parking (proximity to terminal)
 - Improved access along Schoephoester Road





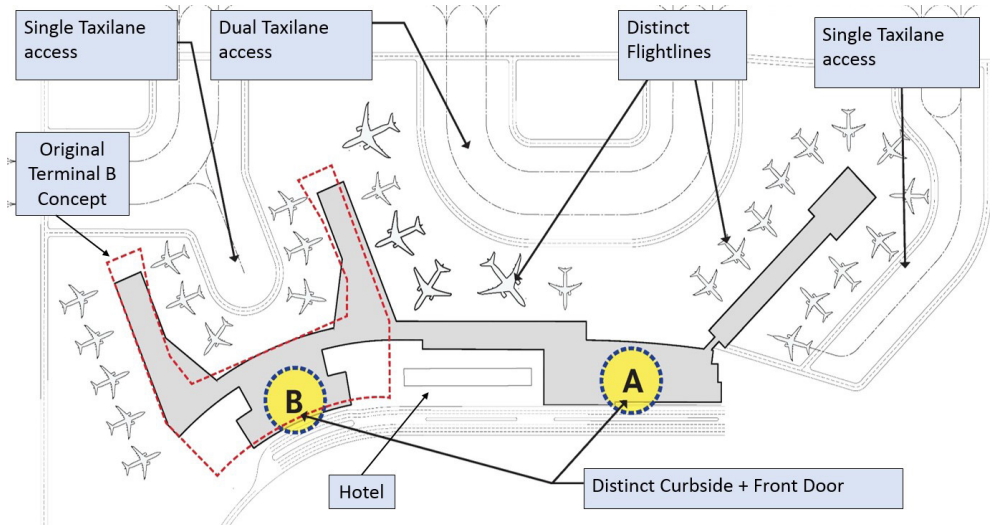
DEVELOPMENT CONCEPTS

Following the Facility Requirement evaluation, the Master Plan provides a set of detailed development alternatives that satisfy the various identified needs. The concepts focus on airfield safety and efficiency, as well as a wide range of terminal area improvements to enhance the passenger experience. The recommended terminal concept includes short term improvements and expansion to existing Terminal A, plus the ultimate construction of a new Terminal B. Cargo and general aviation development concepts are also incorporated.

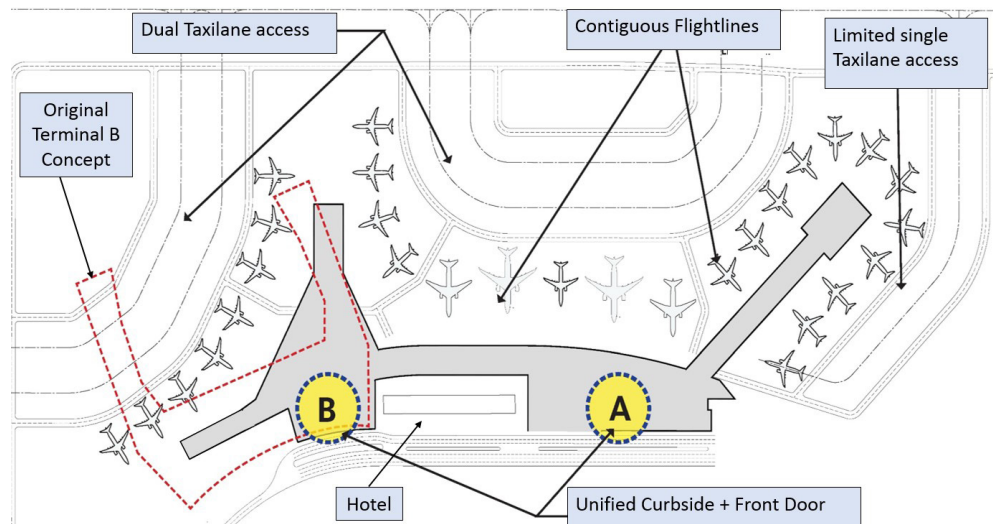
Two alternatives were developed for the new Terminal B, referred to as the Independent Terminal and a Consolidated Terminal concepts. **The Independent Terminal concept aims to create a separate passenger experience from Terminal A.** The result is the minimization of renovation to the existing Terminal A and shifting focus to the new Terminal B development.

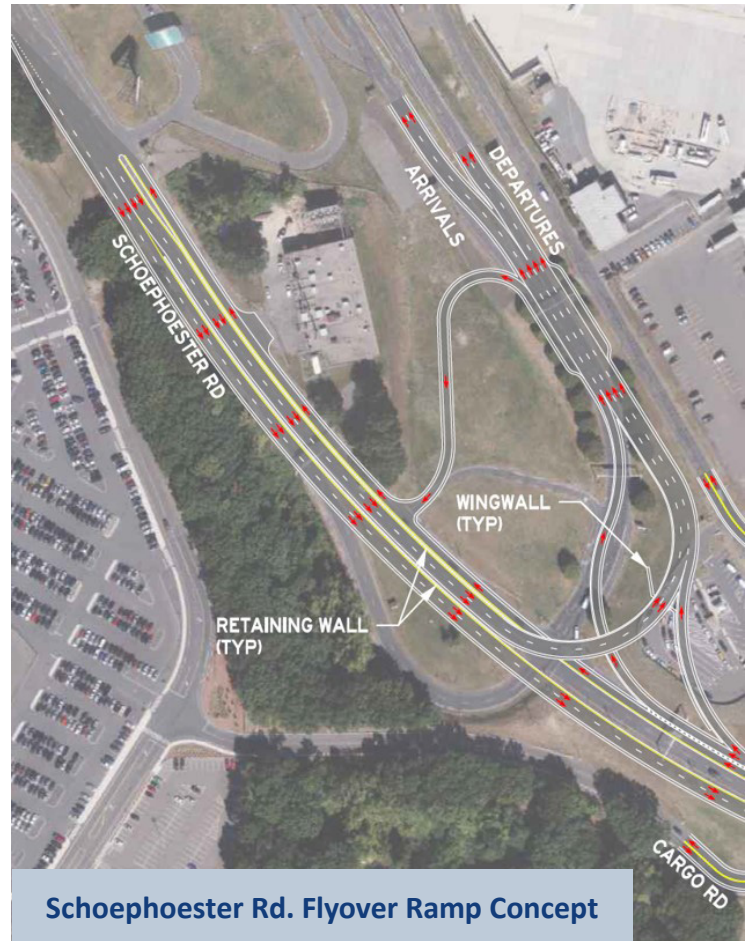
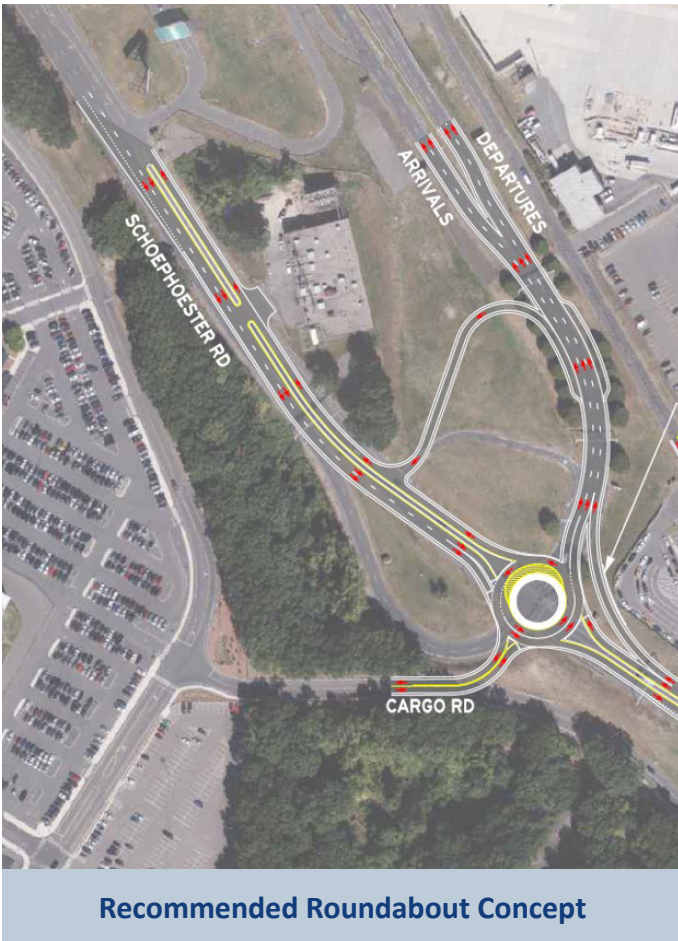
The Consolidated Terminal concept's goal is to have the new Terminal B as an enhancement and extension of Terminal A, resulting in a shared passenger experience, shorter walking distances, and lower construction costs. The Consolidated Terminal alternative is the recommended terminal development alternative.

Independent Terminal Concept



Consolidated Terminal Concept





RECOMMENDED PLAN

Over the course of the planning process, over 50 alternatives were developed based on the findings and anticipated airport projections covered by the Master Plan Update. Of those, 23 were considered and published in the Master Plan Report, such as two concepts to improve vehicle traffic flow to the terminal curb (shown below). After deliberation of the pros and cons of each alternative and discussions between the stakeholders

and the consultant, a recommended plan was selected to meet a comprehensive set of anticipated airport improvements. The plan covers all operational areas of the airport including airside, terminal, and support facilities. The recommended plan becomes the basis for the Airport Layout Plan (ALP) and is illustrated on the following page.





SUMMARY OF COST/CAPITAL IMPROVEMENT PROGRAM

The purpose of the Capital Improvement Plan is to identify projects that are considered necessary to properly accommodate the forecast aviation demand and to set a timeframe in which projects should be accomplished. The projects are divided into three phases: **Short Term (0-5 years)**, **Mid Term (5-10 years)**, and **Long Term (11-20 years)**.

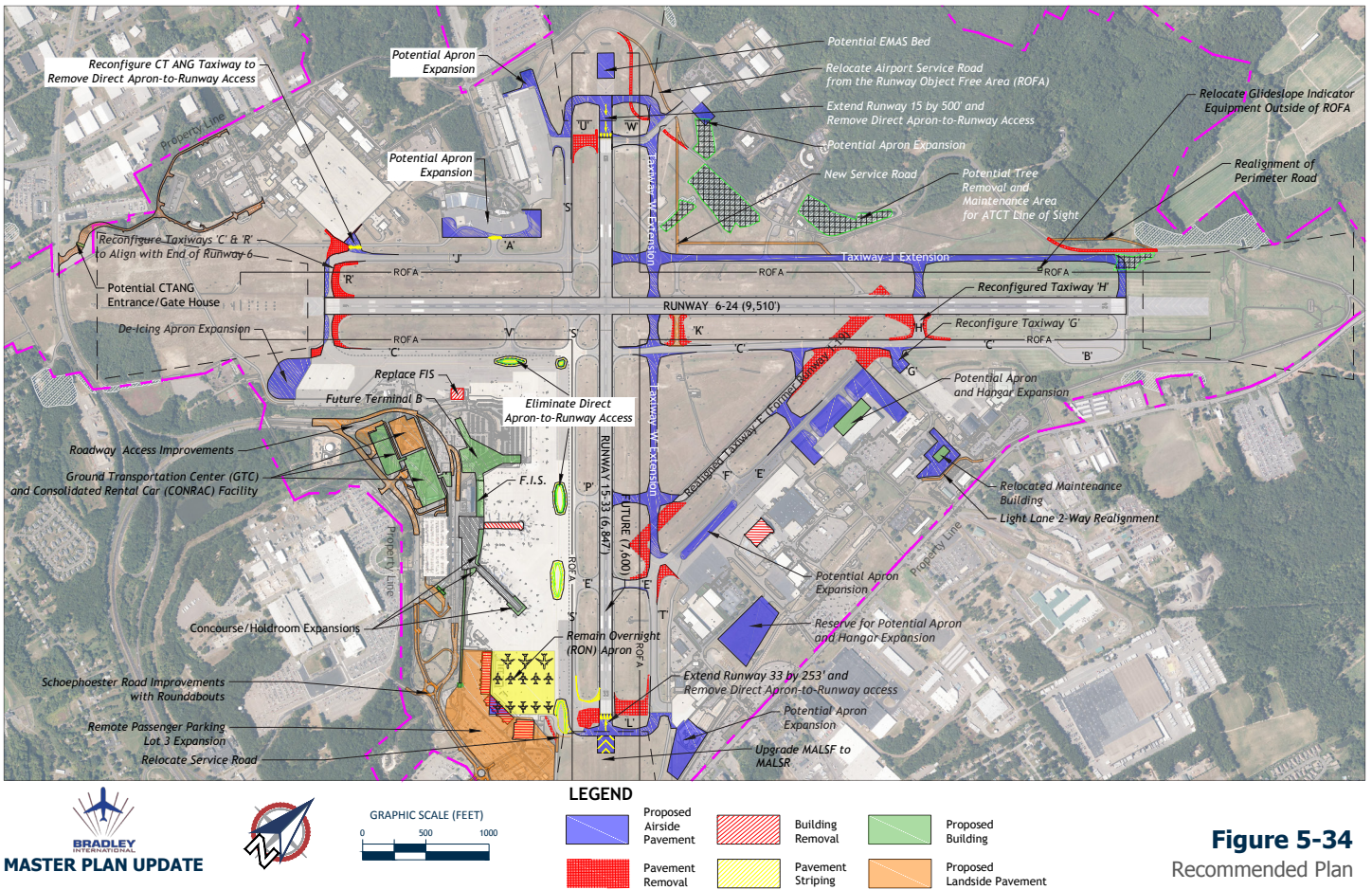
While the timeframe and listed projects are based on expected growth, the actual demands of the airport will ultimately dictate the projects that will be needed in the future.

Short Term Projects (2017-2022)			
Projects	FAA SHARE	BDL SHARE	TOTAL
Airfield Improvements	\$33,536,078	\$14,928,693	\$48,464,771
Terminal Improvements	-	\$223,480,000	\$223,480,000
Airfield Rehabilitation & Miscellaneous	\$22,537,500	\$14,562,500	\$37,100,000
SUBTOTAL	\$56,073,578	\$252,971,193	\$309,044,771

Mid Term Projects (2023-2027)			
Projects	FAA SHARE	BDL SHARE	TOTAL
Airfield Improvements	\$16,537,575	\$33,012,525	\$49,550,100
Terminal Improvements	-	\$281,729,000	\$281,729,000
Airfield Rehabilitation & Miscellaneous	\$25,837,500	\$11,562,500	\$37,400,000
SUBTOTAL	\$42,375,075	\$326,304,025	\$368,679,100

Long Term Projects (2028-2037)			
Projects	FAA SHARE	BDL SHARE	TOTAL
Airfield Improvements	\$50,700,000	\$55,250,000	\$105,950,000
Terminal Improvements		\$514,744,841	\$514,744,841
Airfield Rehabilitation & Miscellaneous	\$52,050,000	\$23,250,000	\$75,300,000
SUBTOTAL	\$102,750,000	\$593,244,841	\$695,994,841

TOTAL	\$201,198,653	\$1,172,520,059	\$1,373,718,712
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LOOKING AHEAD

As New England's second-busiest airport, Bradley International Airport is continuing to grow and is taking the necessary steps in order to best prepare to handle the increasing number of passengers and aviation operations. By identifying key areas and developing tangible solutions, **the 2018 Bradley International Airport Master Plan Update lays the groundwork for the airport to thrive for many years to come and better serve its surrounding community.**





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