

myrtle beach
RT

AIRPORT MASTER PLAN

E X E C U T I V E
S U M M A R Y

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E X E C U T I V E S U M M A R Y

An Airport Master Plan serves as a strategy for airport development that describes the need for, and timing of, airport improvements over a 20-year timeframe. The Master Plan serves to ensure that new airport facilities are located and sized appropriately for future growth, while preserving the flexibility necessary to respond to changing industry conditions. The Federal Aviation Administration, or FAA, requires Airport Master Plans for all commercial service airports. The previous Master Plan Update (MPU) for Myrtle Beach International Airport (MYR) was completed in 2001.

As outlined below, an Airport Master Plan is comprised of several sequential planning elements, while also incorporating public and stakeholder input. The final deliverables include a written technical report and a 15-sheet drawing set that depicts various aspects of proposed future development.

The preparation of this document was financed in part through a planning grant from the Federal Aviation Administration (FAA), as provided under Section 5050 of the Airport and Airways Improvement Act of 1982, as amended. The contents of this document reflect the analysis and findings of Parrish and Partners, LLC, who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this document does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable with the applicable public laws.



PREPARED FOR:
Horry County Department of Airports
South Carolina Aeronautics Commission
Federal Aviation Administration

MYR: YESTERDAY & TODAY

EXISTING CHALLENGES

Several years of unprecedented increases in passenger activity at the airport has created many capacity challenges. In addition, the aircraft operating at MYR today are also much larger than the aircraft the existing terminal building was designed for. These changes at MYR have created several issues to be evaluated and addressed by this Master Plan including:

- Passenger flow conflicts
- TSA checkpoint delays
- Bag makeup congestion
- Gate limitations
- Cell phone lot/access road congestion
- Parking access issues
- Curbside congestion
- Increased fuel demand



Forecasts of future aviation activity levels are a critical early step in the master planning process and are used to determine the need for new or expanded facilities. In accordance with FAA guidance, aviation forecasts are based on available historical data and are prepared for short-, medium-, and long-term planning timeframes. Peak periods, where demand far surpasses yearly averages, are also considered in this planning effort, including the summer activity peaks experienced at Myrtle Beach.

Forecast highlights include:

- Annual passenger enplanements will continue to grow and are expected to increase by 84 percent by 2038 as tourism and the local economy flourish
- Operations are expected to grow, only slower due to a continuing trend of larger aircraft serving MYR, with a 51 percent increase projected by 2038
- A 69 percent increase in freight tonnage is projected by 2038, supporting the needs of the local economy
- General aviation patrons and corporate users alike will continue to favor MYR, resulting in an additional 23 based air

ENVIRONMENTAL OVERVIEW

An environmental overview was conducted to identify features that could affect future airport development projects. As part of the evaluation, federal, state, and local government regulations and databases were reviewed, as well as previously completed studies and reports from MYR. The review was conducted based on guidelines set forth in the National Environmental Policy Act (NEPA) and associated FAA regulations. Based on an evaluation of applicable environmental impact categories, resources of potential concern at MYR include noise and noise-compatible land uses, nearby minority and low-income populations, protected species, water quality, floodplains, jurisdictional wetlands/streams, and hazardous materials.

SUSTAINABILITY PLANNING

FAA’s goal is to make sustainability a core objective of airport planning. Sustainable practices are those that support environmental, social, and economic health and vitality. A sustainability baseline assessment was completed for MYR as the first step of the sustainability planning task. The objective of the baseline assessment was to gain an understanding of the sustainability performance of the sectors of the airport, to better evaluate sustainability metrics and initiatives for potential implementation. Initiatives were developed to guide Horry County Department of Airports (HCDA) in the implementation of specific actions at MYR. HCDA plans to track and monitor various identified initiatives to ensure progress is made toward the overall sustainability goals and objectives.

MYR’s sustainability goals include:

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Wind Data Source:

- National Climate Data Center (NCDC) - National Oceanic and Atmospheric Administration (NOAA)
- Station: 747910 - Myrtle Beach International Airport
- Years of Data: 2008-2017

Wind Rose Table Notes: NCDC wind directions are based on True North. Percent wind coverage is evaluated on the basis of crosswind not exceeding 16 knots for runways having a RDC of C-II.

Metropolitan conditions:

- Visual flight rules are in effect when ceiling is at or above 1,000' and visibility is greater than 3 miles
- Instrument flight rules are in effect either when ceiling is below 1,000', or visibility is lower than 3 miles.

Description	Legend		
	Existing	Future	Ultimate
Runway Pavement			-
Taxiway and Apron Pavement			
Apport Reference Point (ARP)		-	-
On-Apport Hanger/Building			
Building Restriction Line (BRL)		-	-
Apport Property Line			-
Paved Roadway / Driveway / Parking / Service Road			
Pavement Demarcation	-		-
Fence (ETL + 3 Barbed Wires)			
Runway Safety Area (RSA)			-
Runway Obstacle Free Area (ROFA)			-
Approach Runway Protection Zone (RPZ)			-
Departure Runway Protection Zone (RPZ)			-
Runway Obstacle Free Zone (OFZ)			-
NAVD83 Critical Area			-

Runway Data Table Notes:

- Runway 15-36 meets line of sight requirements per FAA AC 150/5300-134 Section 305.
- Landing Gear Configurations for Pavement Strength Ratings:
 - S: Single Wheel Main Gear
 - D: Dual Wheel Main Gear
 - 2D: Two Dual Wheels in Tandem Main Gear
 - 2D/2D2: Two Dual Wheels in Tandem Main Gear / Two Dual Wheels Tandem Body Gear
- There currently are no displaced threshold at MYR.
- RVR : Runway Visual Range

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Takeaway Data Table Notes:

- Penetrations to TOGA: None
- The first geometry of existing Taxiway B and its Connectors (B1 through B5) and Taxiway Z do not comply with updated FAA standards set forth in AC 150/5300-134 - Airport Design. Drawings of taxiways were built before the standards were updated.
- Taxiways are constructed, built to be designed using III-3. However, Taxiway B is currently under design by the Army and the geometry shown matches the most current design. TSA and TOGA shown on the plans match a IV-5 code.
- Existing Taxiway E is a Class II runway, and is designed to accommodate aircraft with a maximum wingspan of 36' 8".
- South Taxiway to AAG is an existing taxiway, and is designed to accommodate aircraft with a maximum wingspan of 90'.

Abbreviations Table		Abbreviations Table	
Abbr.	Description	Abbr.	Description
AAC	Aircraft Approach Category	AFRF	Aircraft Release and Fire Fitting
AC	Airway Circuit	AFR	Aircraft Release Point
ACN	Airport Classification Number	AFR	Aircraft Release Point
ADG	Airline Design Group	ATCT	Air Traffic Control Tower
ADIZ	Air Defense Identification Zone	AVION	Aviation Division
AGL	Above Ground Level	AWOS	Automated Weather Observing System
ALP	Altitude Limit	BRL	Building Restriction Line
ALS	Approach Light System	CAGS	Compound Annual Growth Rate
ALSR-2	High Intensity ALS with SFL (Cat. C or 2)	CAT	Category
AOA	Aircraft Operations Area	C/F	Combined Filing Area
APBN	Airport Beacon	CIAP	Capital Improvement Plan
APM	Airport Master Plan	CLP	Comprehensive Land Use Plan
APRN	Airport Runway	CTAF	Common Traffic Advisory Frequency
APV	Approach with Vertical Guidance	D	Demolition
ARP	Airport Reference Code	DEMO	Demolish

ICAO	International Civil Aviation Organization	PCF	Passenger Condition Index
IFC	International Flight Rules	PCN	Passenger Condition Number
IS	Instrument Landing System	PRM	Precision Runway Alignment
IMC	Instrument Meteorological Conditions	RSL	Runway Shoulder Indicator Lights
CAA	Local Aeronautical Information	R	Runway
LARS	Local Area Augmentation System	RDG	Runway Design Code
LS	Localizer	RESL	Runway End Identifier Lights
LDA	Landing Distance Available	NAV	Area Navigation
LDA	Localizer Type Directed Aid	BNP	Required Navigation Performance
LDR	Lead-in Lighting System	RFZ	Runway Obstacle Free Area
LED	Light Emitting Diode	HCR	High Cross Road
LS	Low-Intensity Runway System	RPZ	Runway Protection Zone
LR	Lane	RSR	Runway Safety Area
LOC	Localizer	RVB	Runway Visual Range
MAC	Minimum Approach Ceiling	RWY	Runway
MALP	Minimum Intensity ALS	RVZ	Runway Visual Zone
MALSR	Minimum Intensity ALS with SFL	S	Signage/Obstacle Limits

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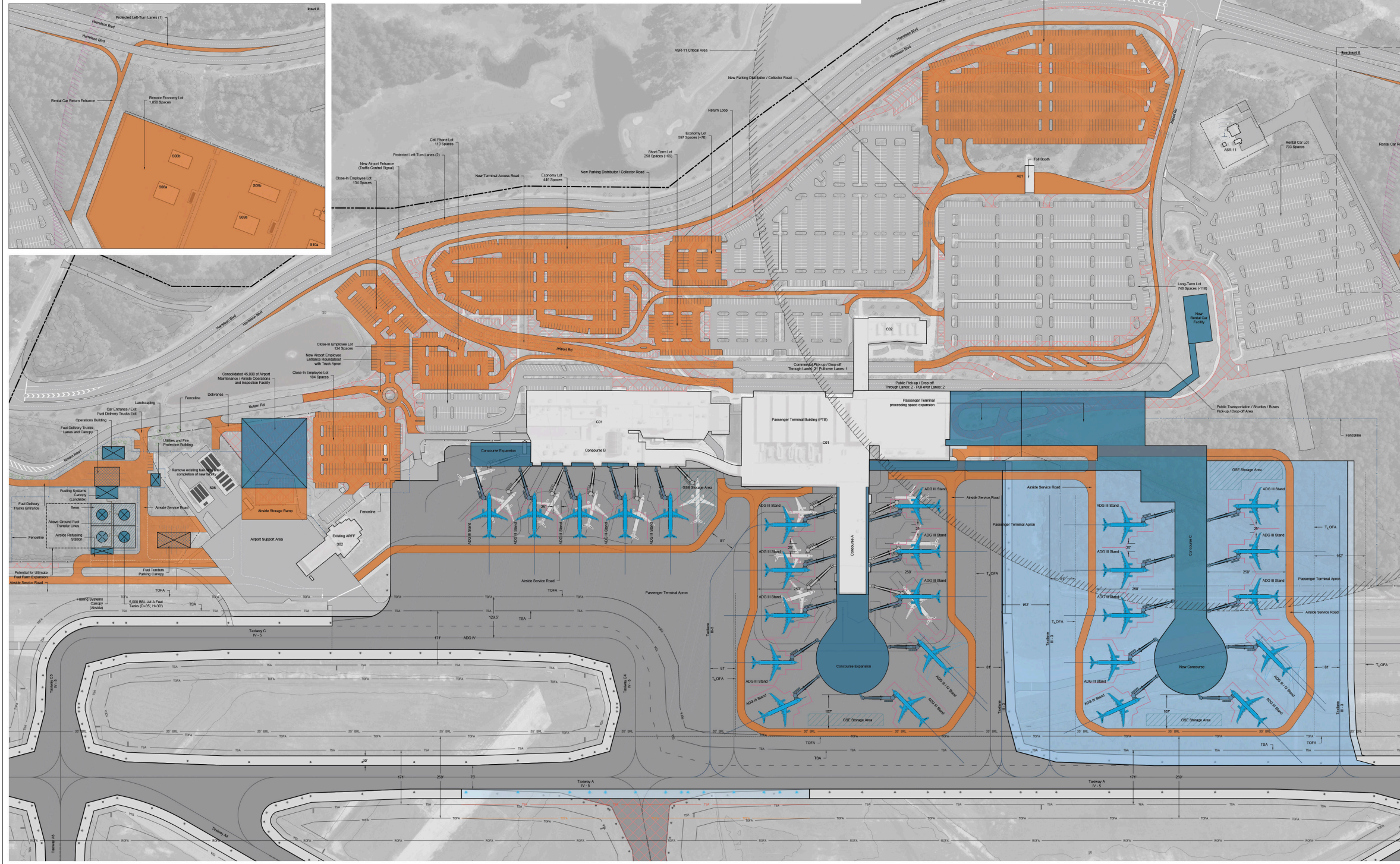
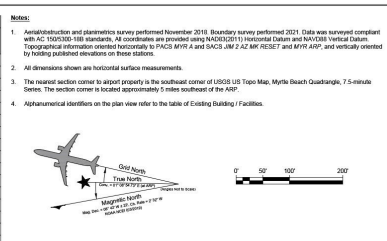
A key component of a Master Plan is the Airport Layout Plan (ALP) drawing set. This comprehensive drawing set incorporates all of the proposed improvements and is used to help future infrastructure development to ensure projects are completed in a logical, sustainable, and efficient manner. The ALP set totals 15 sheets including:

- Title Sheet
- Airport Layout Drawings (Existing and Future)
- Airport Airspace Drawings
- Inner Portion of the Approach Surface Drawings
- Runway Departure Surface Drawing
- Terminal Area Drawings
- Airport/Community Land Use Compatibility Drawing
- Exhibit A – Airport Property Inventory Map



Legend				Legend			
Description	Existing	Future	Ultimate	Description	Existing	Future	Ultimate
Runway Pavement				Runway Safety Area (RSA)			
Taxiway and Apron Pavement				Runway Obstacle Free Area (TOFA)			
Airport Reference Point (ARP)				Approach Runway Protection Zone (RPZ)			
On-Airport Hangar/Bldg				Departure Runway Protection Zone (RPZ)			
Building Restriction Line (BRL)				Runway Obstacle Free Area (TOFA)			
Airport Property Line				Provisional Obstacle Free Area (POFA)			
Property Acquisition				Taxiway Safety Area (TSA)			
Off-Airport Building				Taxiway Obstacle Free Area (TOFA)			
Planned Roadway / Driveway / Parking				Taxiway Obstacle Free Area (TOFA)			
Unplanned Roadway / Driveway / Parking				NAVAID Critical Area			
Pavement Demolition				Electric Poles and Power Line			
Tree Line				Water Hydrant			
Trees				Storm Pipes & Culverts			
Fence (BIR + 2 Barbed Wire)				Light Pole			
Topographic Contours							
Water Body							

Existing Buildings / Facilities			
Building ID	Usage	Operator / Tenant	Top Elevation (Feet MSL)
C01	Passenger Terminal Building	HCDA	77.7
C02	Rental Car Facility	Multiple	77.7
S01	ATCT	FAA	115.0
S02	ABF	ABF	91.0
S03	Airport Maintenance Facility	HCDA	46.7
S04	Airport Maintenance Facility	Tenant	59.0
S05	Airport Maintenance Storage Facility	HCDA	55.3
S06	Fuel Farm - Commercial	HCDA	Unknown
S07	Fuel Farm - General Aviation	HCDA	Unknown
S08	Rental Car Staging Facility	Air / Budget	± 36.9' - ± 42.0'
S09	Rental Car Staging Facility	Hertz	± 36.9' - ± 42.0'
S10	Rental Car Staging Facility	Alamo / Enterprise / National	± 36.9' - ± 41.9'
S11	Rental Car Staging Facility	Alamo / Enterprise / National	± 36.9' - ± 41.9'
S12	Rental Car Staging Facility	Costa / Thrifty	± 37.0' - ± 41.4'
S13	Aircraft Maintenance Shop	Alaska Technical Services / Rampside Repair Services	59.2
M1	Aircraft Maintenance Shop	Precoast Support	59.0
M2	Aircraft Maintenance Shop	Myrtle Airline Services	59.0
M3	Aircraft Maintenance Shop	Tenant	58.6
M4	Aircraft Maintenance Shop	Tenant	Unknown
M5	Aircraft Maintenance Shop	Tenant	73.2
B01	Helicopter Test Business	Coastal Helicopters	± 29.9' - ± 32.4'
O01	General Aviation Terminal	HCDA	56.9
O02	Tramcar	Multiple	55.5
O03	Flight School / Aircraft Hangar	Myrtle Beach Academy of Aviation	54.9
O04	Aviation Maintenance School	Pittsburgh Institute of Aeronautics (PIA)	48.5
O05	Maintenance Facility	Tenant	56.1
O06	Aircraft Hangar	Executive Helicopt	± 28.6' - ± 38.2'
O07	Aircraft Hangar	Tenant	61.8'
O08	Aircraft Hangar	Tenant	61.9'
O09	Tenant Aircraft Hangar	HCDA	Unknown
A01	Parking Toll Gate	HCDA	40.9'



Horry County, SC

Myrtle Beach International Airport

South Carolina Aeronautics Commission

Federal Aviation Administration

DATE

REVISION

APP

Terminal Area Drawing - Commercial

Myrtle Beach International Airport (MYR)

AIRPORT LAYOUT PLAN

Horry County, South Carolina

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Drawn: TPA & H.C.

Checked: JMW

Approved: ACP

Date: 07/11/2023

Sheet No.: 11 of 15

Scale: 1" = 500'

AIRPORT LAYOUT PLAN SET CONTINUED...

The Commercial Terminal Area Plan presented to the left.



