

**Martin State Airport
Environmental Assessment for Phase I Improvements
Scoping Information Package**

Introduction

The Maryland Aviation Administration (MAA) is proposing a number of projects for implementation at Martin State Airport (MTN). An Environmental Assessment (EA) is being completed to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA). This document provides preliminary information regarding the EA to facilitate public review and comment. The document includes the following sections:

- Background
- Proposed Action
- Purpose and Need
- Preliminary Alternatives
- Environmental Analysis
- Preliminary Schedule
- Comment Form

The MAA encourages you to review these materials and provide comments by November 25, 2013. Comments provided by this time will assist the MAA in identifying issues early in the development of the EA. A Comment Form is attached for your use. You are welcome to submit comments either by mail at the below address or by email to rbowie@bwiairport.com.

Please submit written comments to:

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Background

MTN is a general aviation (GA) reliever airport located in Baltimore County, Maryland. The Federal Aviation Administration (FAA) designates an airport as a “reliever” airport when the airport’s intended function is to relieve congestion at large airports such as Baltimore Washington International Thurgood Marshall Airport (BWI). Because MTN serves many general aviation activities in the Baltimore area, MTN is designated as a reliever to BWI.

MTN is located on approximately 775 acres near the Chesapeake Bay. Owned by the Maryland Department of Transportation and operated by the MAA, MTN serves general aviation, corporate, and military air traffic (175th Wing of the Maryland Air National Guard (MANG)). The airfield includes an 8,100-foot long by 150-foot wide runway (Runway 15/33), helipad and multiple taxiways. Aviation support facilities include aircraft hangars and tie down areas, a terminal building, an Airport Traffic Control Tower (ATCT) and fuel facilities.

The MAA prepared an Airport Layout Plan (ALP) Update for MTN in 2011. The ALP Update identified the improvements needed at MTN to comply with the FAA design standards and meet projected demand levels through a 20 year planning period. The improvements were recommended for phased implementation based on the following time periods: Phase I present -2017, Phase II 2018-2022 and Phase III 2023-beyond. The FAA approved the 2011 ALP showing the phased improvements.

The 2011 ALP was updated to reflect minor changes and approved by the FAA in February 2013. In May of 2013, a revised ALP reflecting additional improvements needed to meet new FAA design standards was submitted to the FAA.

The MAA is proposing to implement Phase I Improvements as identified on the ALP. In order to implement these improvements, FAA action in the form of ALP approval and federal funding will be required. NEPA requires environmental review of federal actions including federal funding, approvals and certifications. Therefore, an EA is being prepared in accordance with FAA policies and procedures for considering environmental impacts: FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* and FAA Order 1050.1E, *Environmental Impacts, Policies and Procedures*.

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Proposed Action

The Proposed Action consists of the Phase I Improvements identified on the MTN ALP. The Phase I Improvements include the following:

- Reconstructing Runway 15/33;
- Relocating the Runway 15 and Runway 33 ends/thresholds (the relocation of the runway ends/thresholds could impact noise exposure around MTN and would require removal of both on- and off-airport vegetative and non-vegetative obstructions);
- Reconfiguring taxiways (including the extension or relocation of existing taxiways and addition of new connecting taxiways, which has the potential to increase impervious surfaces at the Airport);
- Relocating the helipad (which has the potential to impact noise exposure surrounding MTN);
- Relocating aircraft navigational aids (including relocation of existing navigational aids in sensitive development areas and vegetation removal);
- Redeveloping the GA facilities (including reconfiguration and relocation of existing t-hangars, removal of existing pavement and redevelopment of associated GA facilities); and
- Relocating the Airport Traffic Control Tower (ATCT).

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Purpose and Need

Defining the Purpose and Need is essential in providing a sound justification for the proposed action. In addition, the Purpose and Need is used as the primary foundation to develop reasonable alternatives to the Proposed Action.

The **purpose** of implementing the Proposed Action is to meet various FAA criteria, enhance airfield safety, improve airfield efficiency and accommodate existing and anticipated demand at MTN.

The Proposed Action is **needed** to address the following issues:

- *FAA Criteria*
 - The existing runway safety area (RSA) and runway object free area (ROFA) do not meet FAA design criteria as defined in Advisory Circular (AC) 150/5300-13A, *Airport Design*.
 - There are penetrations to the existing 14 Code of Federal Regulations Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, approach and transitional surfaces as well as the FAA Advisory Circular (AC) 150/5300-13A threshold siting surfaces.
- *Airfield Safety*
 - Jet blast protection is not provided in accordance with AC 150/5300-13A.
 - A number of the existing runway/taxiway intersections are not right angle intersections. According to AC 150/5300-13A, "FAA studies indicate the risk of a runway incursion increases exponentially on angled (less than or greater than 90 degrees) taxiways used for crossing the runway."
 - Taxiways B and C converge at the runway and create a large expanse of pavement. According to AC 150/5300-13A this could lead to pilot disorientation.
 - The existing ATCT provides only marginal visibility to the Runway 33 threshold due to obstructions between the ATCT and the runway 33 threshold; the low height of the tower; and, the relatively long distance to the runway end.
 - Runway 15/33 has deteriorated due to age and Alkali Silica Reactivity (ASR). Runway 15/33, a Portland Cement Concrete (PCC) runway, was constructed between 1940 and 1958. The PCC exhibits extensive ASR which causes the concrete pavement to expand and crack resulting in structural concerns.
- *Airfield Efficiency*
 - Parallel Taxiway F is not a full length taxiway and thus there is not a direct route to and from the Runway 15 threshold.

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- *Existing and Anticipated Demand*
 - Current hangar space does not meet existing demand and the existing T-hangars in the midfield area are nearing the end of their useful life.
 - Sufficient takeoff runway length must be maintained for the existing and future critical aircraft operations, specifically the Gulfstream V. Therefore, the minimum Accelerated Stop Distance Available must be 7,000 feet for takeoffs from both runway ends based on the 1999 letter from the FAA that concurred with the need for a 7,000-foot runway and the runway length analysis documented in the Martin State Airport, Airport Layout Plan Update prepared in 2011.

Preliminary Alternatives

Analysis of alternatives is key to the NEPA process. The EA will include consideration of reasonable alternatives to the Proposed Action. The number of alternatives considered will be influenced by the degree of potential impact as well as the stated purpose and need. The EA will consider potential alternatives based on the alternative's ability to meet the purpose and need of the Proposed Action. It is anticipated that the following on-airport alternatives will be considered:

No Action Alternative - Consideration of the No Action Alternative is required by NEPA per the Council on Environmental Quality (CEQ) Regulations. The No Action Alternative represents MTN in its current state without any proposed project action(s). The No Action Alternative is illustrated on **Figure 1**.

Minimum Action Alternative – This alternative includes those improvements required to meet standards and to maintain the maximum runway pavement determined eligible for FAA funding. The Minimum Action Alternative is illustrated on **Figure 2**.

Proposed Action Alternative – This alternative includes the Phase I development identified on the MTN ALP and as illustrated on **Figure 3**.

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Environmental Analysis

The EA will assess the environmental consequences of the Proposed Action and the reasonable alternatives. All categories of impact will be addressed according to the criteria included in FAA Orders 1050.1E and 5050.4B. Impact analyses will be conducted for current conditions and future conditions. Future conditions are defined as the first full year after implementation of the improvements and five years thereafter.

While all of the environmental impact categories identified in FAA Orders 1050.1E and 5050.4B will be addressed in the EA, the major emphasis is expected to be on those categories listed below. Preliminary review of the affected environment and available materials indicated that these categories may require detailed analysis.

- Coastal Resources
- Fish, Wildlife, and Plants
- Water Quality
- Wetlands
- Floodplains

Preliminary review indicated that the following categories may be impacted and some analysis may be required.

- Air Quality
- Compatible Land Use
- Construction Impacts
- Hazardous Materials, Pollution Prevention, and Solid Waste
- Historical, Architectural, Archeological, and Cultural Resources
- Noise
- Section 4(f) Resources

The following resources are either not present in or around MTN or would be only minimally impacted and would require little or no analysis. The EA will provide succinct documentation as to why these resources would not be affected or only minimally impacted.

- Farmlands
- Light Emissions and Visual Impacts
- Natural Resources, Energy Supply, and Sustainable Design
- Secondary (Induced) Impacts
- Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks
- Wild and Scenic Rivers

The anticipated level of analysis for the resource categories is based on preliminary review of the affected environment. Ongoing field studies, detailed analyses and agency consultation will determine the appropriate level of analysis for each resource category.

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Preliminary Schedule

The EA is anticipated to last approximately 24 months. Major milestones are depicted on the following schedule. Note that there will be another opportunity to participate in the development of the EA. It is anticipated that the Draft EA will be available for agency and public review and comment in early 2015. Comments on the Draft EA will be addressed as part of the preparation of the Final EA.

| Task | 2013 | | | | | 2014 | | | | | | | | | | | | 2015 | | | | | | | |
|-------------------------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|
| | August | September | October | November | December | January | February | March | April | May | June | July | August | September | October | November | December | January | February | March | April | May | June | July | August |
| Scoping | | | | | | | | | | | | | | | | | | | | | | | | | |
| Impact Analysis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Draft EA | | | | | | | | | | | | | | | | | | | | | | | | | |
| Draft EA Comment Period | | | | | | | | | | | | | | | | | | | | | | | | | |
| Response to Comments | | | | | | | | | | | | | | | | | | | | | | | | | |
| Final EA | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEPA Finding | | | | | | | | | | | | | | | | | | | | | | | | | |

This preliminary schedule is based on the assumption that an EA will remain the appropriate level of NEPA review. If during any part of the EA process it is discovered that the environmental impacts (any or all) associated with the Proposed Action will not result in a Finding of Significant Impact (FONSI), the FAA will issue a notice of intent to prepare an environmental impact statement (EIS). The preliminary schedule does not reflect this potential outcome.

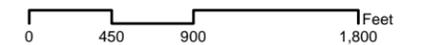


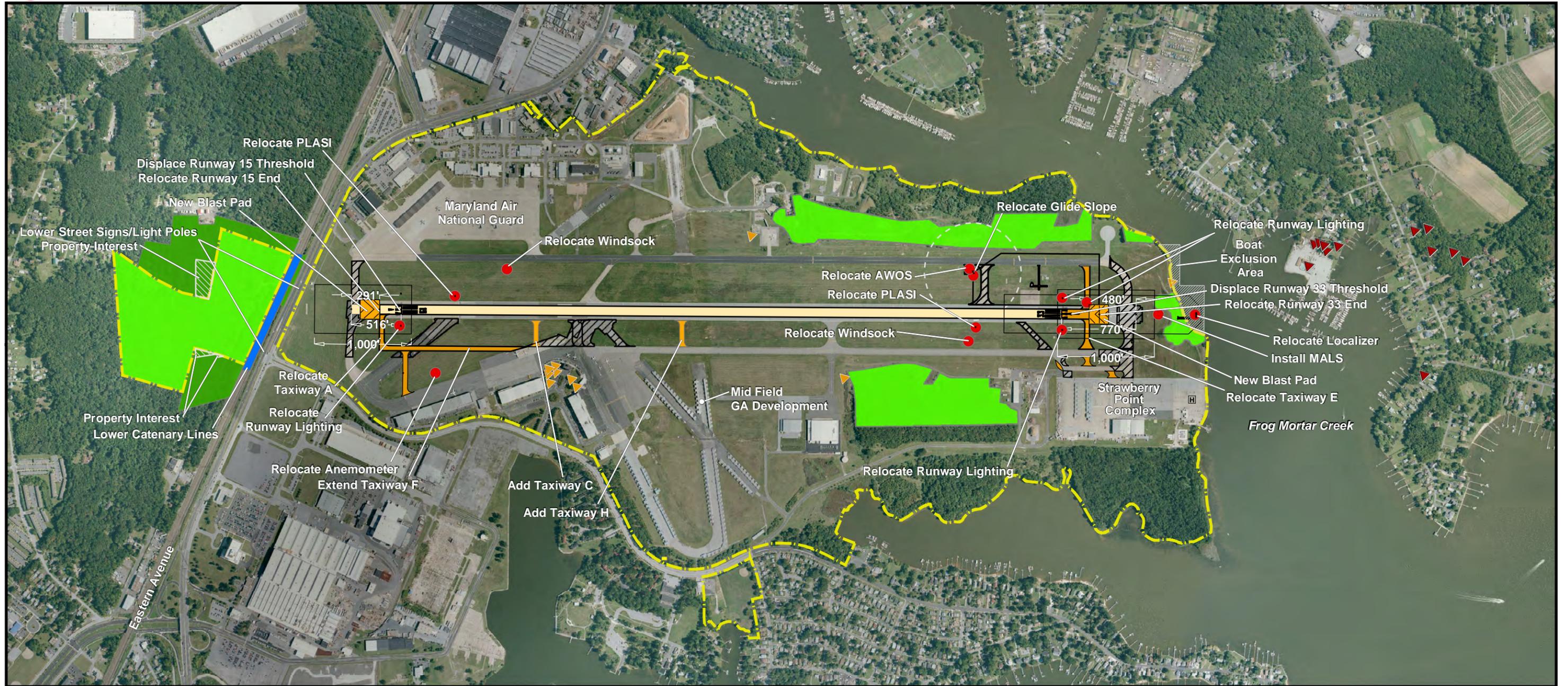
LEGEND

NAVAIDS

--- AIRPORT PROPERTY LINE

No Action Alternative
Figure 1





LEGEND

RUNWAY 15/33 IMPROVEMENTS

- RUNWAY THRESHOLD DISPLACEMENT (SEE MARKINGS)
- RUNWAY END RELOCATION (SEE MARKINGS)

TAXIWAY IMPROVEMENTS

- NEW PAVEMENT
- PAVEMENT REMOVAL

NAVAIDS

- RELOCATION
- AIRPORT PROPERTY LINE

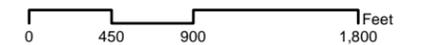
LANDSIDE FACILITIES/LAND USE

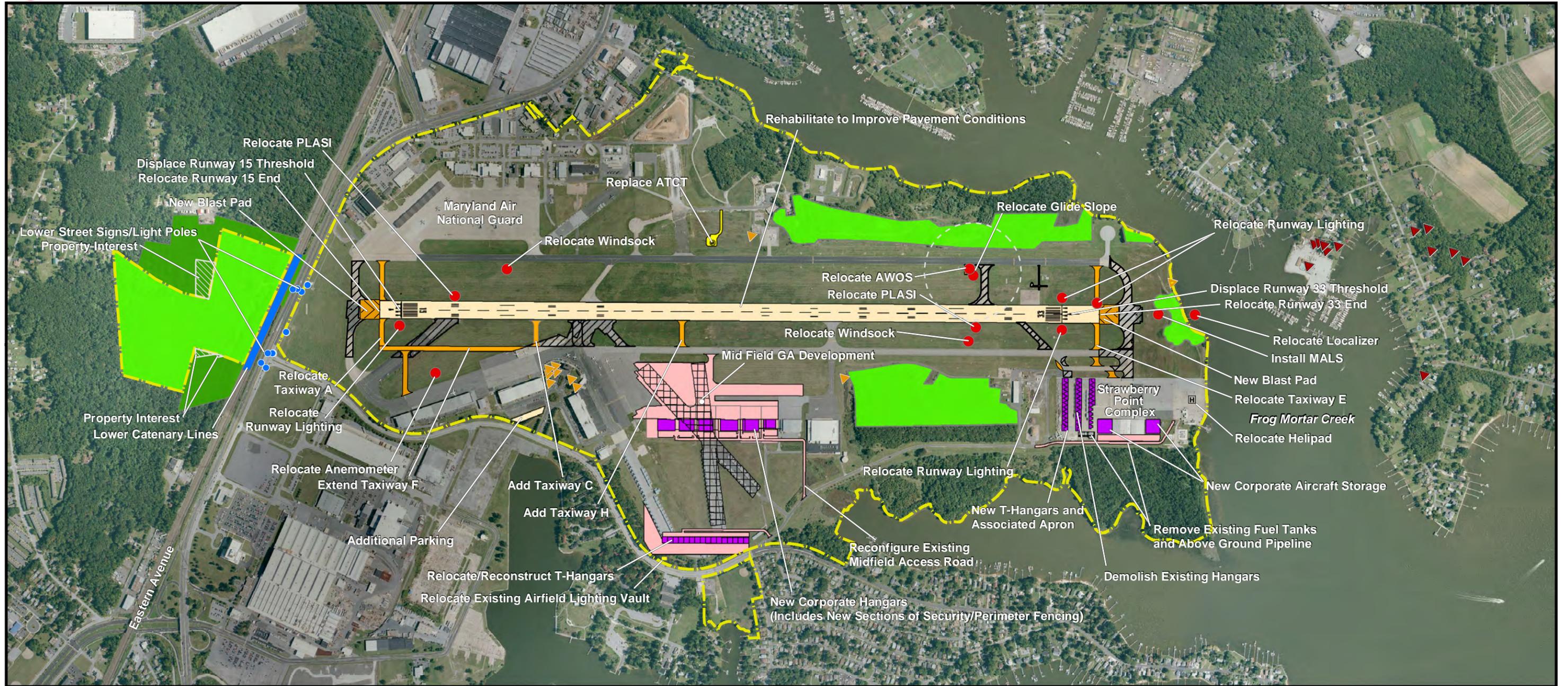
- PROPERTY INTEREST

VEGETATION REMOVAL

- ON-AIRPORT VEGETATION REMOVAL
- OFF-AIRPORT VEGETATION REMOVAL
- MAN-MADE OBSTACLE MITIGATION
- ON-AIRPORT ISOLATED TREE REMOVAL
- OFF-AIRPORT ISOLATED TREE REMOVAL

**Minimum Action Alternative
Figure 2**





LEGEND

RUNWAY 15/33 IMPROVEMENTS INCLUDING FULL LENGTH REHABILITATION

- RUNWAY THRESHOLD DISPLACEMENT (SEE MARKINGS)
- RUNWAY END RELOCATION (SEE MARKINGS)

TAXIWAY IMPROVEMENTS

- NEW PAVEMENT
- PAVEMENT REMOVAL

NAVAIDS

- RELOCATION
- AIRPORT PROPERTY LINE

GENERAL AVIATION FACILITIES

- NEW STRUCTURE
- PAVEMENT/STRUCTURE REMOVAL
- NEW PAVEMENT

SUPPORT FACILITIES

- FACILITY REPLACEMENT / RELOCATION

LANDSIDE FACILITIES/LAND USE

- NEW PAVEMENT
- PROPERTY INTEREST

VEGETATION REMOVAL

- ON-AIRPORT VEGETATION REMOVAL
- OFF-AIRPORT VEGETATION REMOVAL
- MAN-MADE OBSTACLE MITIGATION
- ON-AIRPORT ISOLATED TREE REMOVAL
- OFF-AIRPORT ISOLATED TREE REMOVAL

Proposed Action Alternative Figure 3

