

## **Section 12 Ultimate Airport Concept**

This section describes the major airfield and landside elements envisioned for the ultimate phase of SSA, beyond DBO+20. These facilities are representative in nature and may change during the course of airport development at SSA.

### **12.1 Ultimate Airfield Concept**

The preferred ultimate airfield concept is described and discussed in Section 3.2.3, Page 33. It consists of six parallel east-west runways capable of accommodating four simultaneous independent approach procedures during IFR CAT-III weather conditions. The preferred ultimate airfield concept is shown in **Exhibit 3-7**.

The ultimate airfield capacity has been estimated at 1.1 to 1.5 million annual operations, 30 to 60 million annual enplaned passengers (60 to 120 million total annual passengers), and 9,600 to 16,400 peak hour enplaned passengers.

### **12.2 Ultimate Airport Landside Access Concept**

The preferred ultimate airport landside access concept is described and discussed in Section 4.2.3, Page 46. It consists of east and west airport access roads with no secondary vehicular connection between. Access between the east and west terminal facilities could be accomplished by an underground automated people mover. This concept also has the flexibility to evolve into a continuous access through the airport, if future conditions warrant this type of access. **Exhibit 5-1** shows the preferred ultimate airport landside access.

### **12.3 Ultimate Airport Terminal Facility Concepts**

A series of passenger terminal concepts were developed for the ultimate airport and are presented in the Appendix. The alternative terminal concepts represent a broad range of possible future ultimate development scenarios for SSA and were developed to reflect the estimated ultimate capacity of the preferred ultimate airfield. To accommodate the estimated airfield capacity<sup>1</sup>, the ultimate passenger terminal complex has been planned for a minimum of 250 narrow body equivalent gates<sup>2</sup> with a 2.8 to 4.8 million square foot terminal complex including the central passenger terminal building and concourses.

By adopting a dynamic strategic planning approach, SSA can be developed sequentially, in which facility development can be correlated over time with the growth of passenger demand, thereby minimizing risk and optimizing airport efficiency and utilization through all phases of development.

The following description summarizes the salient characteristics of the preferred concept for the ultimate passenger terminal facility:

- West and east airport entrances with new highway interchanges at I-57 and IL-1.
- West terminal complex with attached linear pier concourse.
- Optional east terminal depending on future passenger demand.
- Remote concourses with passenger access via an underground automated people mover system.

<sup>1</sup> Gross capacity estimates indicate that the Ultimate Airfield could handle approximately 1.1 to 1.5 million annual operations.

<sup>2</sup> See Table 8.-4 in Section 8.4.1 .

## 12.4 Ultimate Airport Support/Ancillary Facilities

It is anticipated that support facilities at SSA would expand to accommodate future operational needs. Since these facilities are demand-driven it is very difficult to estimate the extent, location and the magnitude of the areas needed for the ultimate airport. It is expected that sufficient land area located adjacent to the runway system and passenger terminal complex will be available for the expansion and development of support/ancillary facilities in the ultimate phase of development.

## 12.5 Preferred Ultimate Airport Concept

It is anticipated that the preferred ultimate airport concept, as shown in **Exhibit 12-1**, would evolve through the logical expansion of the DBO+20 Airport facilities. The ultimate airfield and landside access have been identified in Section 3.2.3, Page 33, and Section 4.2.3, Page 46.

As discussed in Section 5, IDOT considers that it is premature to determine the exact concept of the ultimate passenger terminal complex and support/ancillary facilities. In order to preserve the widest possible range of potential future development options, the area bordered by the two innermost runways should be preserved to provide flexibility for implementing any of the terminal complex concepts determined by future air travel demand, the airlines operating at SSA in the future, and future design and operational requirements.

## 12.6 Preferred Ultimate Airport Footprint

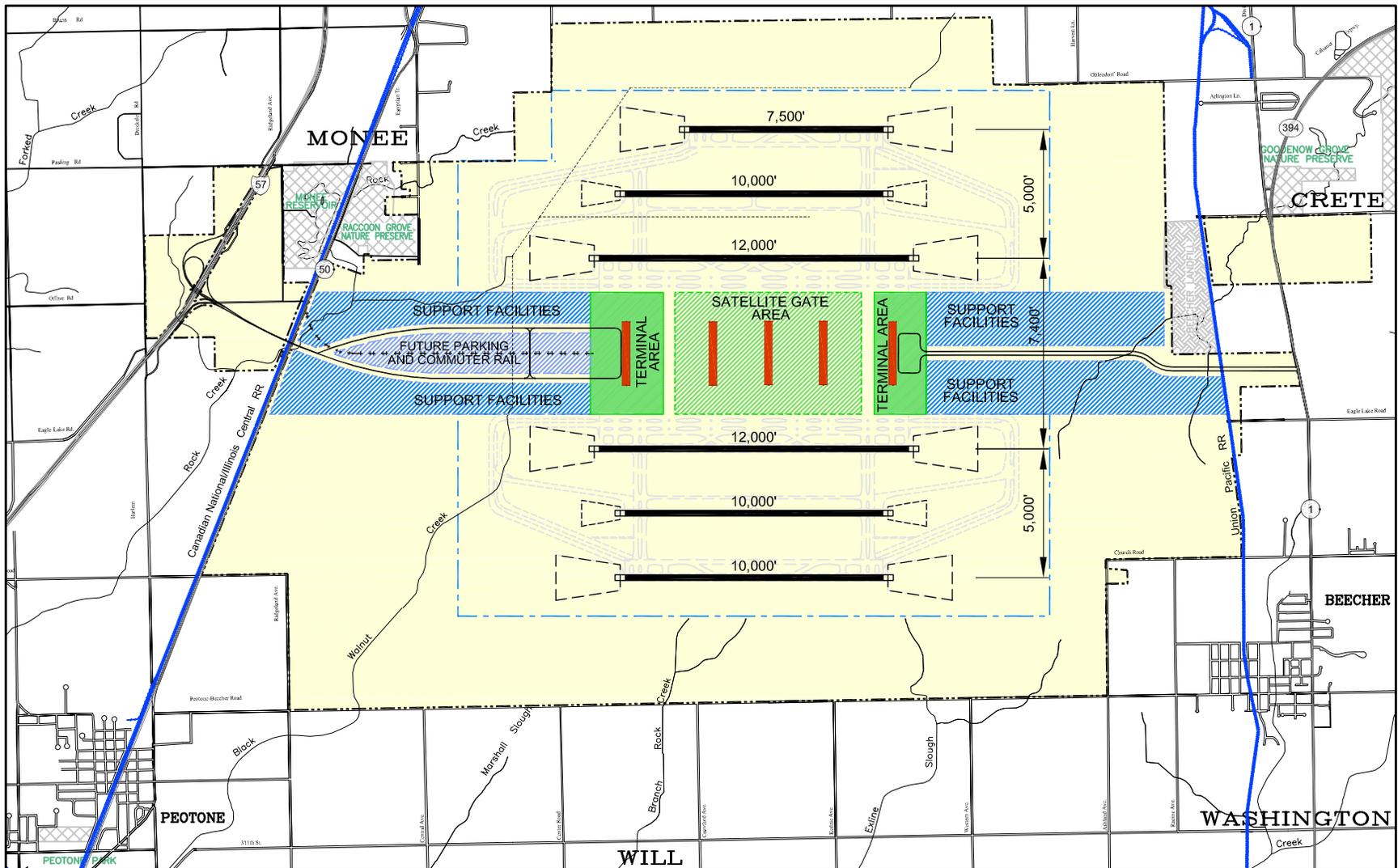
The land required for the preferred ultimate airport concept, as shown in **Exhibit 12-1**, is reduced in size from the original 1998 Phase I Engineering Report. This is due to the release of land from the original airport footprint, which had been reserved for the following functions:

**East-West Connector Road and secondary access to the Airport** (northern border of airport) – originally planned to connect I-57 and I-394. This connector road was planned to provide access for airport users coming from the east through a new secondary access road running north-south on airport property from the connector to the new western airport access road. It was determined in May of 2004 that, in light of developments since 1998, this connector was not needed within the DBO+20 planning period. The East-West Connector Road is no longer linked to the airport and may be developed by others on an independent schedule on land outside of the airport. Section 4 discusses the preferred airport access plan which includes the development of eastern access to a eastern terminal as demand justifies. Consequently, land for both the connector and the secondary access road have been released from the footprint.

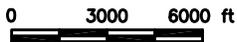
**Crosswind Runway and Airport Services Area** (southwest corner of airport) - originally planned to provide a crosswind runway for commuter aircraft. The need for this runway has dissipated since 1998 and it is not currently needed (in this location) for the Inaugural airport or in the future for the ultimate airport. As indicated on **Exhibit 12-1** and discussed in Section 3.2.3, page 33, there are no requirements for a crosswind runway in the ultimate plan. Also located in this area were airport service functions such as waste water treatment, fuel farm, storm water management ponds, and environmental mediation. Given current FAA regulations, that prohibit these functions within 10,000 feet of commercial service runways, most of this land is no longer required and these functions are being accommodated elsewhere. Consequently, the land south of Peotone-Beecher Road has been released from the footprint

These actions have reduced the ultimate airport footprint to approximately 20,000 acres.

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**Legend**

- AIRPORT FOOTPRINT
- PROPOSED AIRPORT RUNWAY
- SUPPORT FACILITIES
- TERMINAL AREA
- FUTURE TERMINAL AREA
- PARK LAND
- LANDFILL (CLOSED)
- COMMUTER RAIL

**Inaugural Airport Program  
Preferred Ultimate Airport Concept  
with Removal of Land to South**