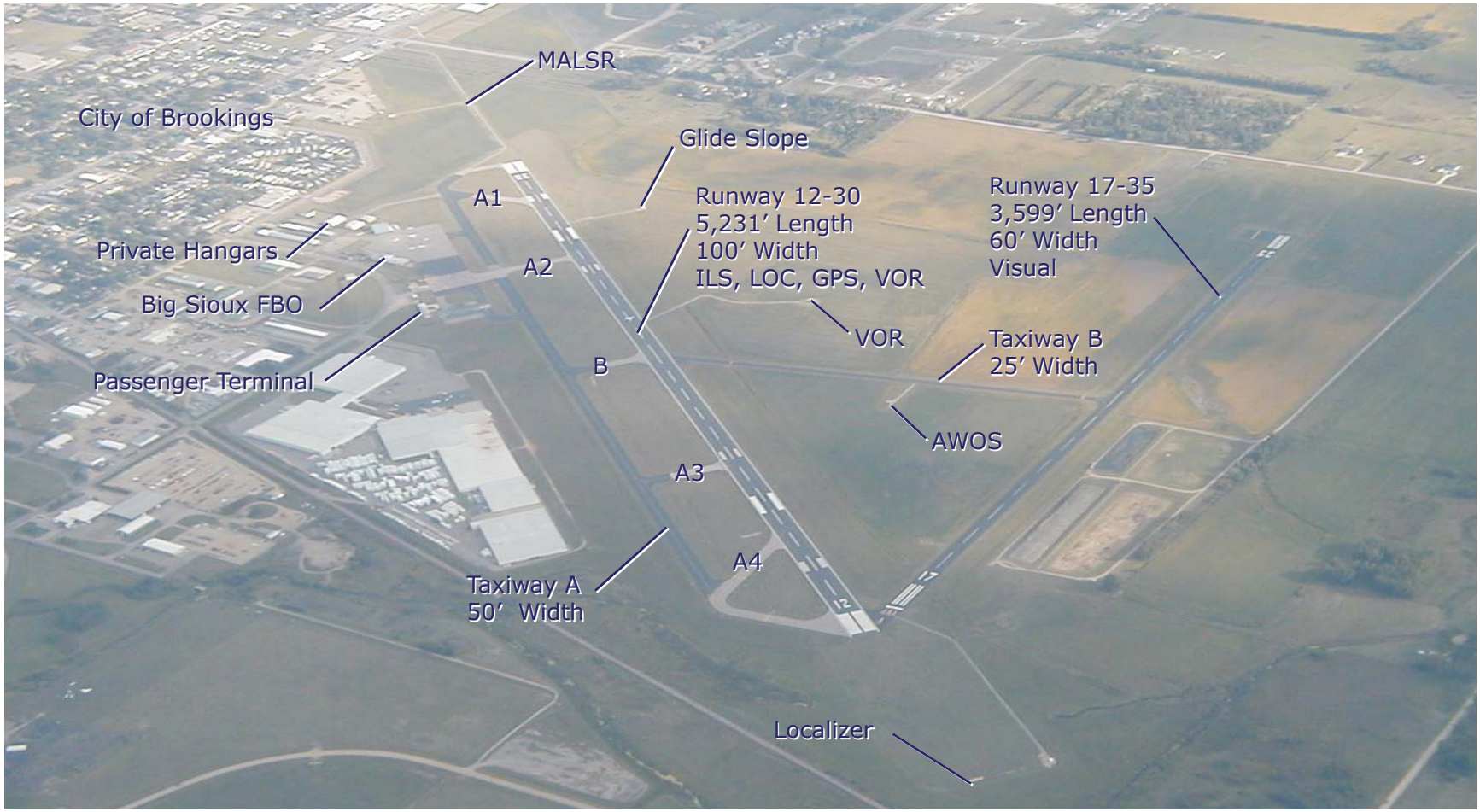
EXECUTIVE SUMMARY

MASTER PLAN UPDATE

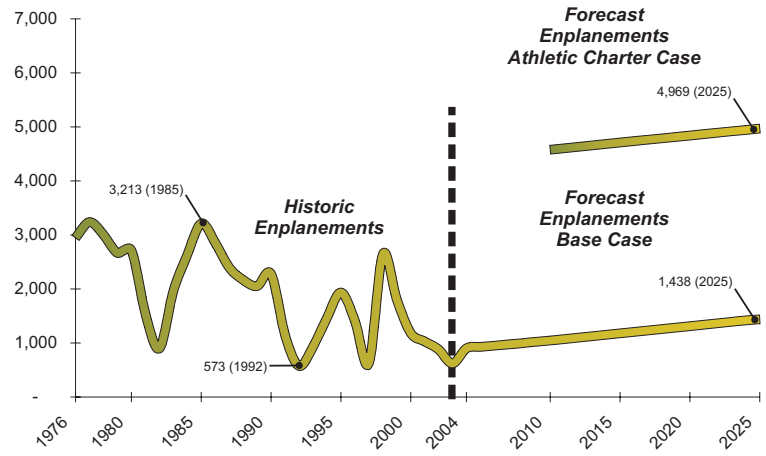
AIRPORT FACILITIES



Airport Facilities Location Map

INTRODUCTION

The Brookings Regional Airport (BKX) is owned and operated by the city, under the direction of the full-time airport manager. The Airport offers commercial air service, provides a home to South Dakota State University's student pilot program, is a base for the community's general aviation community, and generates a growing amount of corporate aviation traffic. The airport's key activity levels are summarized to the right.



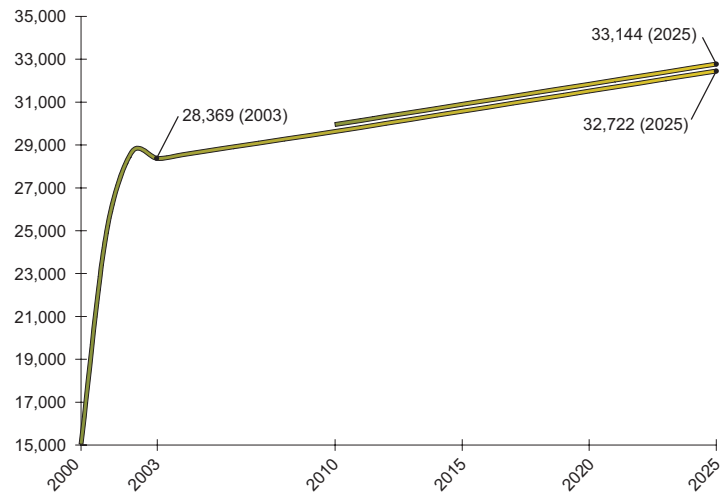
Enplanements - Athletic Charter Case

MASTER PLAN PROCESS AND GOALS

The FAA developed the Airport Master Plan process to assist airport owners evaluating current conditions and planning for the future of airports. This process helped Brookings determine its' goals for the Airport. They are:

- maintain and enhance safety
- provide the capasity to meet present and future needs
- meet the first two goals in ways that are cost effective and compatible with the surrounding community

This executive summary summarizes the results of the master planning process. It presents two alternatives that achieve the goals of the Airport and outlines the next steps.



Operations

MAINTAINING OR ENHANCING SAFETY

FAA publishes design guidelines that all airports receiving federal funds (like BKX) are required to follow as a condition of receiving those funds. These guidelines can be described as being relating to either airport safety or airport capacity. Meeting the standards contained in the guidelines helps ensure that a reasonable level of operational safety exists, that airport facilities meet the requirements of activities actually occurring (or forecast to occur) at airport on a regular basis, and that an airport is eligible to continue receiving federal funds for airport improvement projects.

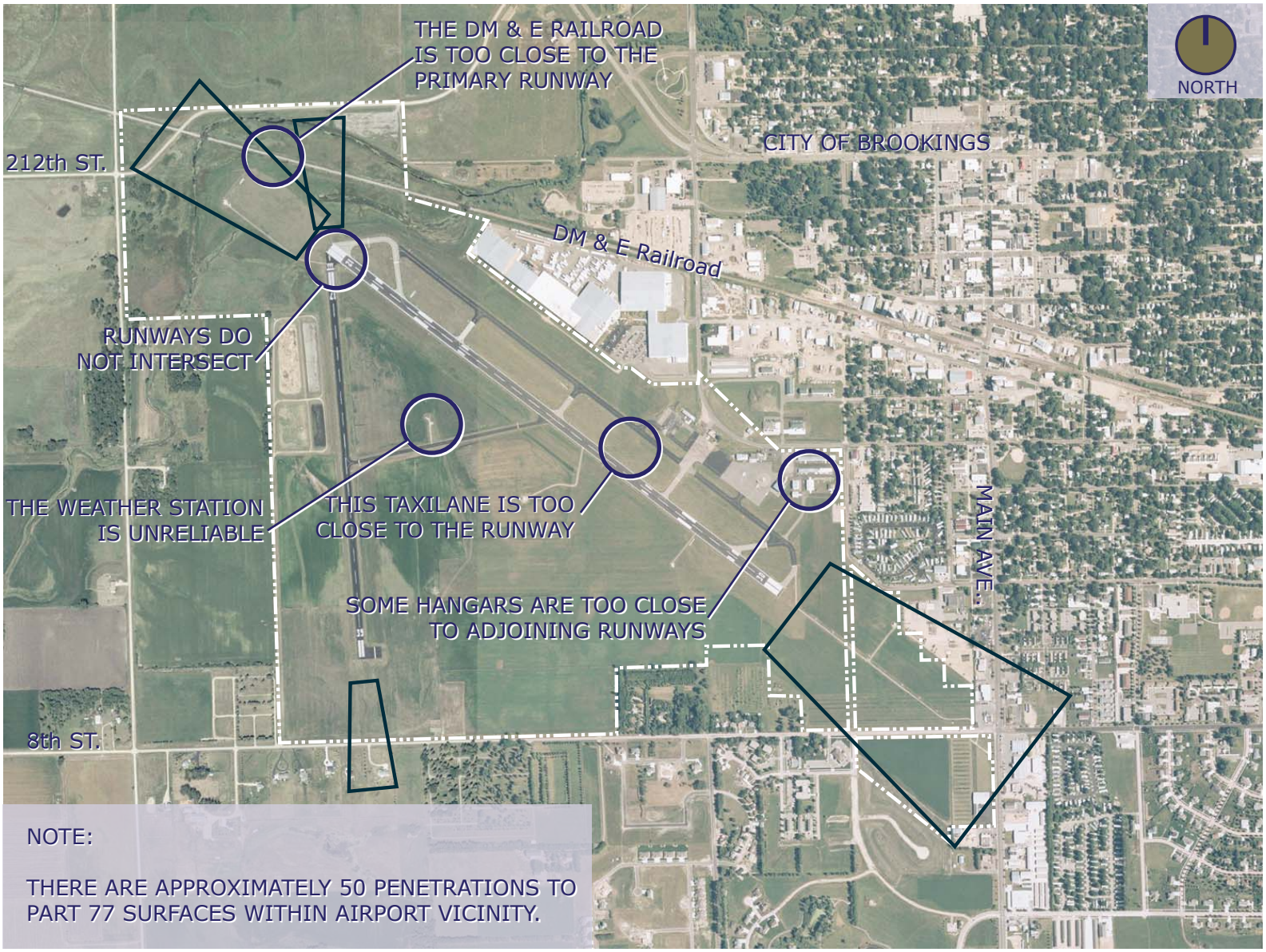
BKX does not meet several safety-related guidelines and the FAA has indicated that future federal funding may be jeopardized if the most significant of these infractions are not addressed. The most significant are the incompatible land uses in the Runway Protection Zones (RPZs). RPZs are intended primarily to protect people and property on the ground. Therefore, the FAA prefers that no structures of any kind exist in RPZs. Another significant issue is that some hangars and the railroad are too close to surrounding taxiways and runways. The complete list of infractions are shown on the graphic to the right.

All airport development concepts created during the master plan process sought to correct some or all of these issues.

View looking towards Runway 12-30

IMPORTANCE OF MEETING FAA CRITERIA

to be provided....



Safety Related Issues

CAPACITY ISSUES

Capacity-related guidelines are usually not as directly tied to continued federal funding as safety-related guidelines, however, falling short of these guidelines can decrease the utility of an airport, drive away existing users, and hamper the ability to attract new ones. This can have a negative impact on the overall economy of the community surrounding the airport.

BKX has several capacity related issues, the most significant of which are surrounding development and wetlands. These capacity issues make any expansion of the airport expensive or impossible. There is also a need for a new hangar area, longer runways, and a new or expanded passenger terminal building. The complete list of needs are shown in the graphic to the right.

As with the safety-related issues, all of the future development concepts sought to meet some or all of these needs.

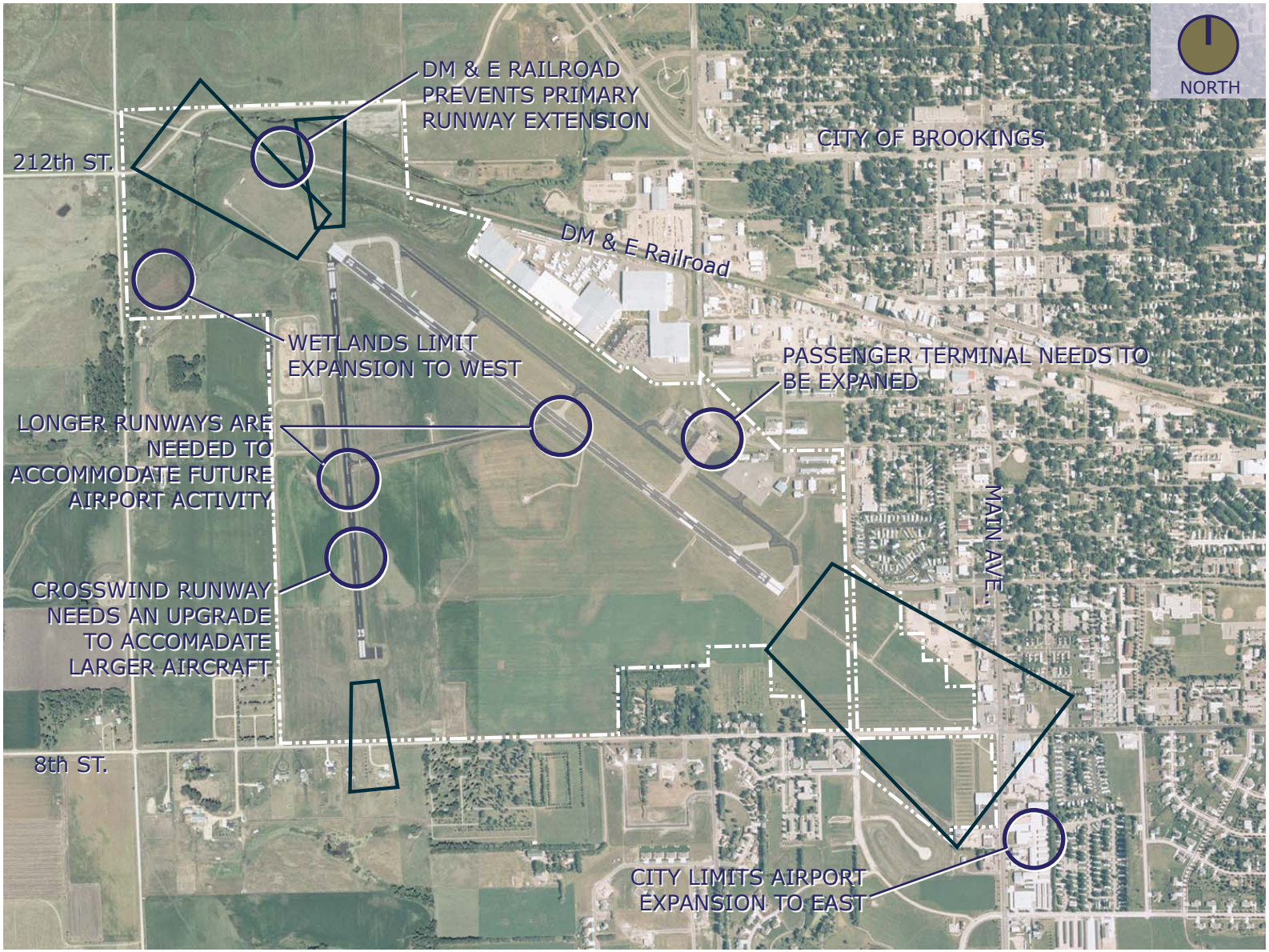
Image of security checkpoint within terminal

ENPLANEMENTS SUMMARY

to be provided...

RUNWAY LENGTH SUMMARY

to be provided...

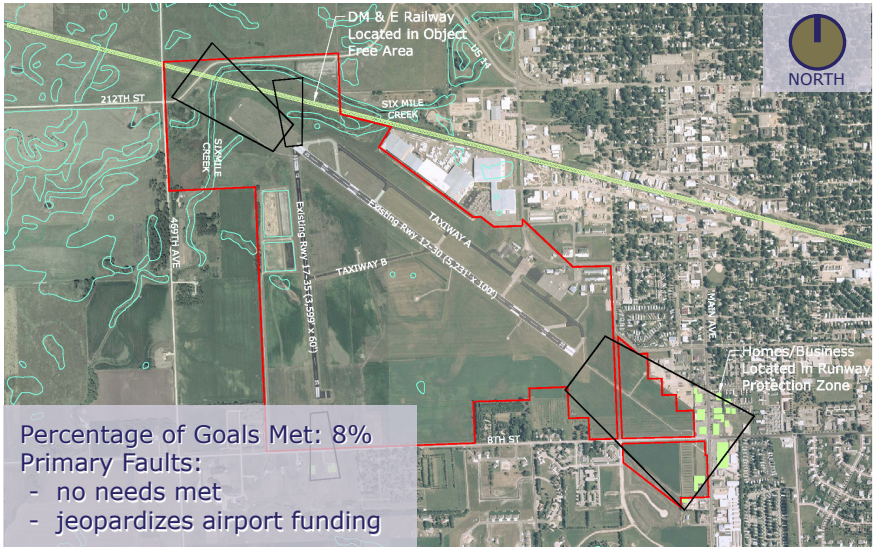


Capacity Related Needs

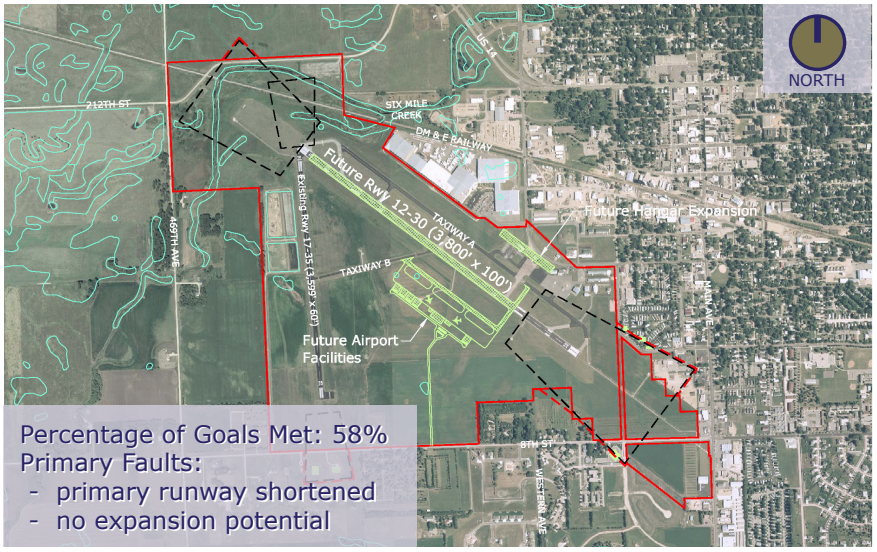
AIRPORT ALTERNATIVES

The concepts that emerged from the master plan represent the results of months of meetings between and work by the Airport Manager, the Airport Commission, the City Council, FAA and SD/DOT personnel, the public and the project team. The meetings generated a tremendous amount of ideas for the creation of development concepts that would allow the airport to continue to be a vibrant and growing part of the community. The project team took these ideas and generated a new series of alternatives, which were then presented in another series of meetings to the City, the FAA, SD/DOT, airport users and the public. After each meeting, some alternatives were eliminated and others were modified based on input received. The meeting process was then repeated. In the end, eight alternatives emerged and will be discussed in this executive summary.

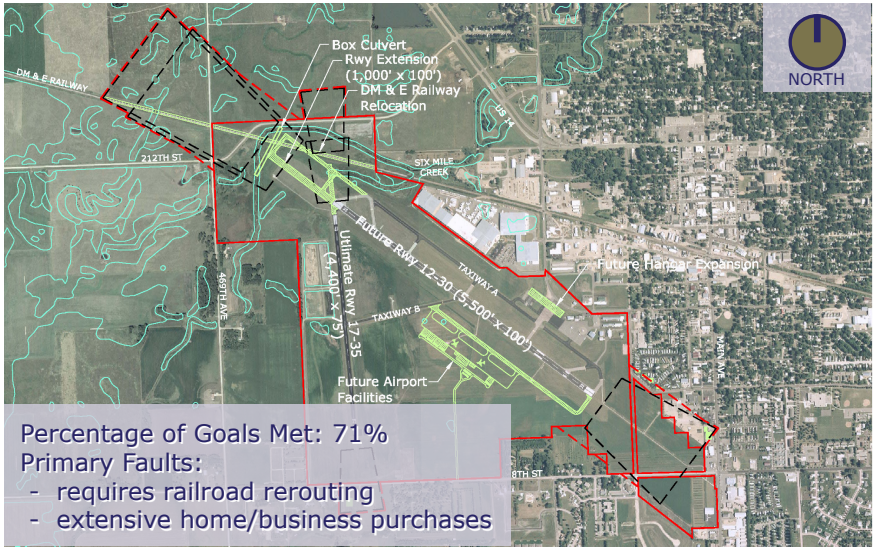
They were evaluated based on their ability to resolve the safety and capacity issues facing the airport in a manner that is compatible with the surrounding community and cost effective. Each alternative was assigned a score reflecting the level to which it met the Master Plan goals. After the evaluation, six were eliminated and two were selected for further evaluation. The six eliminated alternatives are shown on the following pages, with a brief summary of why there were eliminated. The two preferred alternatives follow.



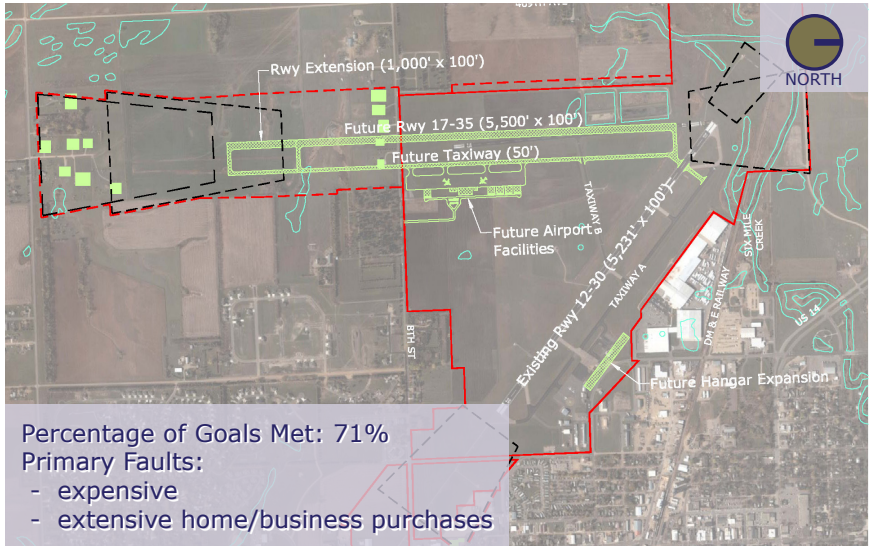
Alternative A - No Action (Not Preferred)



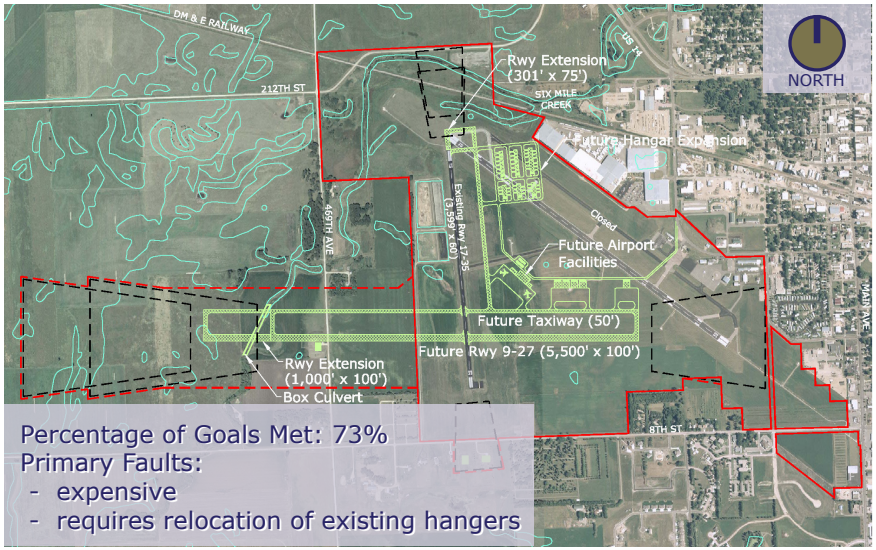
Alternative B - Minimal Improvements (Not Preferred)



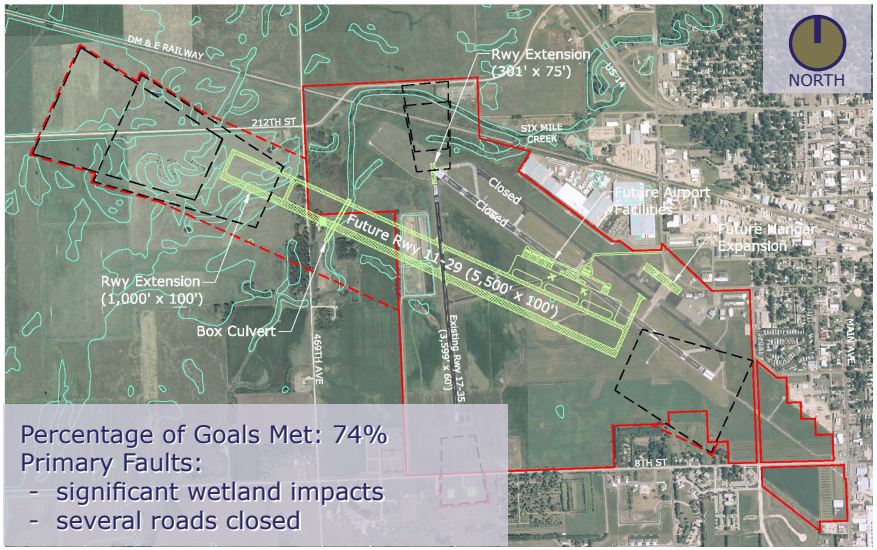
Alternative C - Extend Runway 12-30 to the Northwest (Not Preferred)



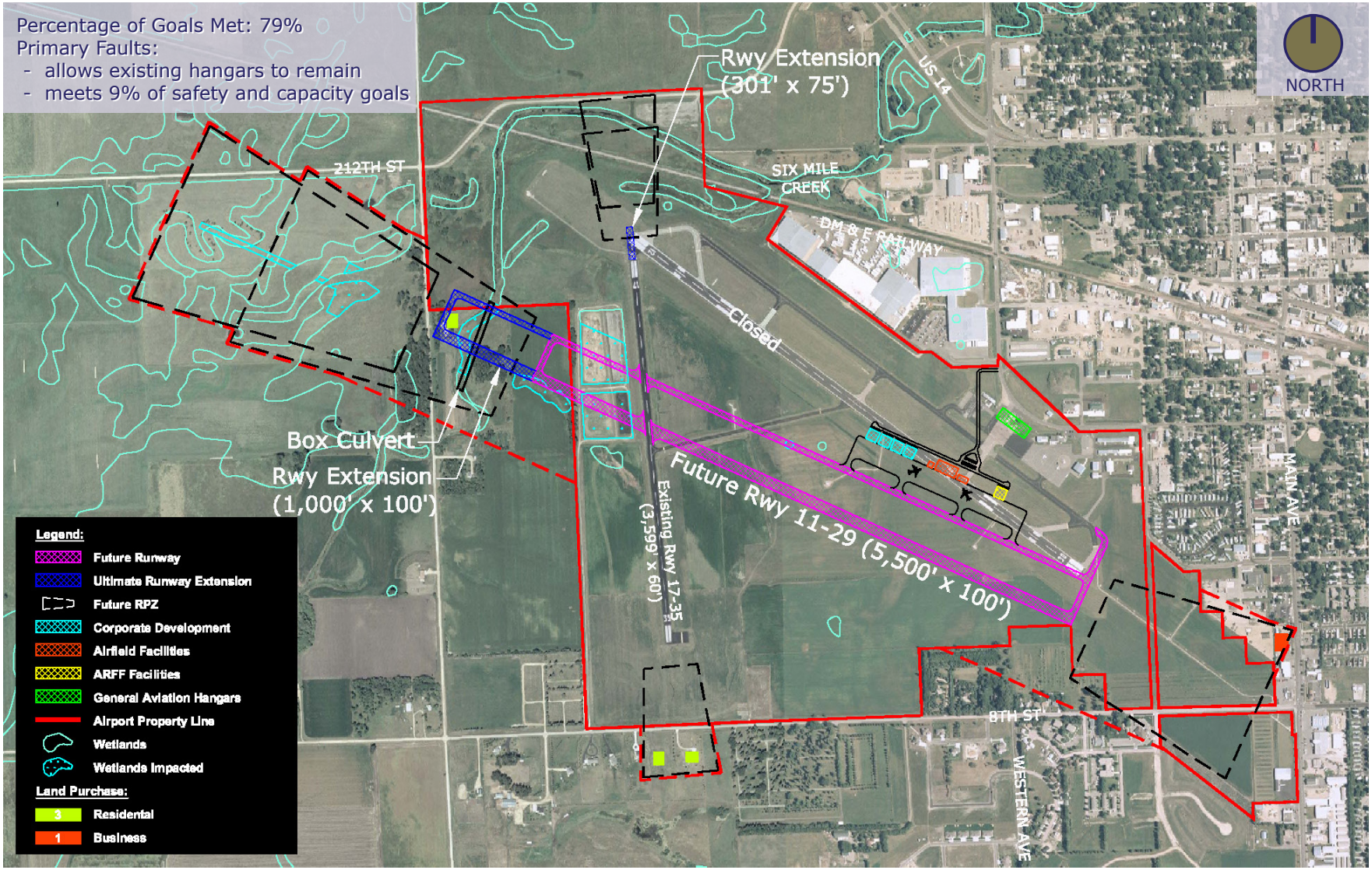
Alternative E - Construct New North - South Runway (Not Preferred)



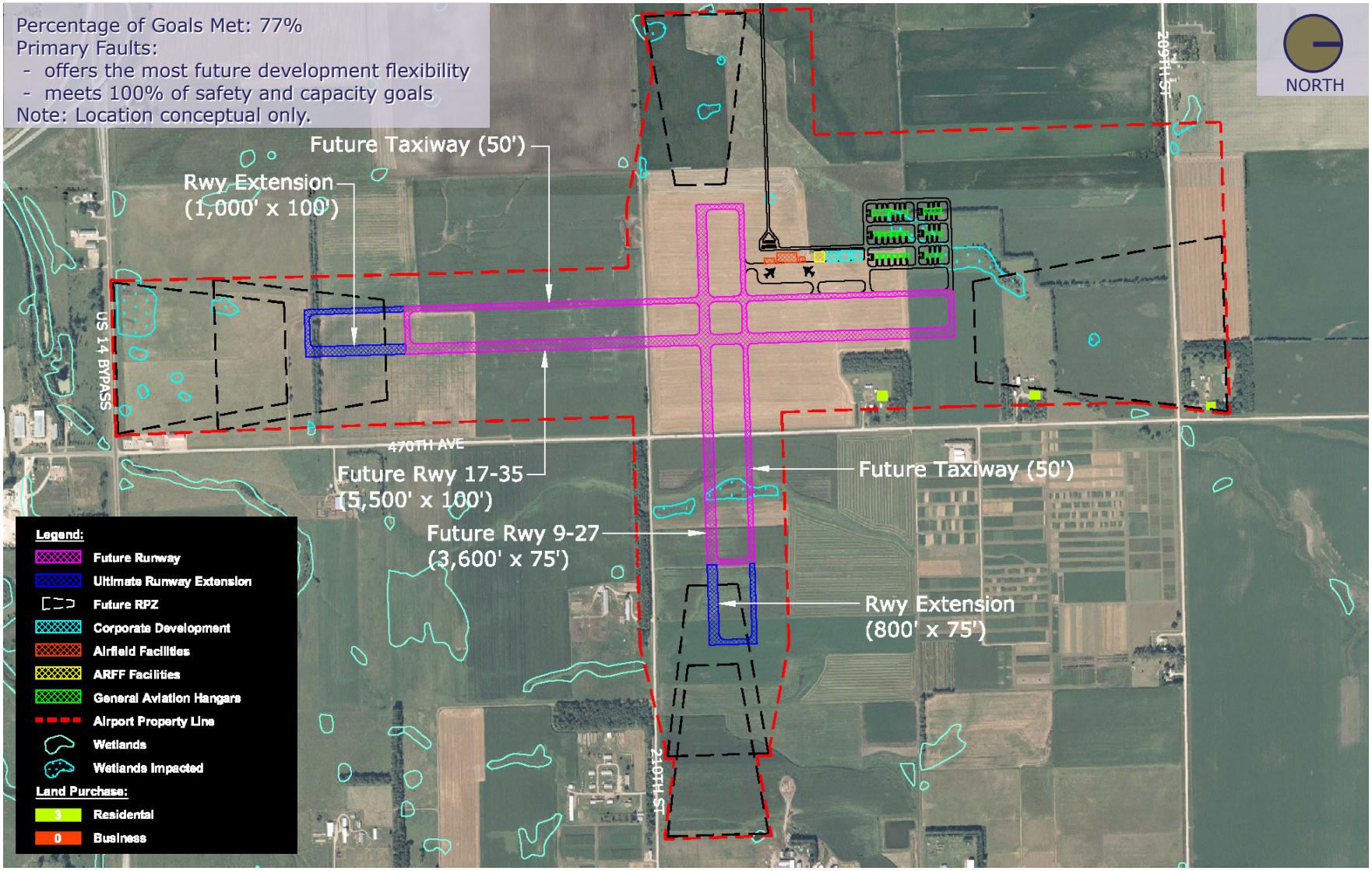
Alternative D - Construct New East-West Runway (Not Preferred)



Alternative F - Construct New NW-SE Runway (Not Preferred)



Alternative G - Construct New NW-SE Runway (Selected for Further Study)



Alternative H - Construct New Airport (Selected for Future Study)

NEXT STEPS

An airport master plan is just the first step in preparing an airport for the future. Site Selection Studies (when a new airport is being considered), Environmental Assessments (EAs), Airport Layout Plans (ALPs), design drawings, and construction all follow.

The two preferred alternatives both provide ways that BKX can resolve its current issues and grow well into the future. Even though the on-airport alternative scored slightly higher, the City felt that the new airport alternative has enough potential that it warrants more study. Given that both preferred alternatives hold so much potential, the City elected to carry both of them forward through a Dual Track process. This process will get the airport up to the point where design drawings can be created.

This process will include further analysis of the on-airport alternative, a site selection study for the new airport alternative, a full EA for both alternatives and numerous public open houses. At the end of the Dual Track process the City will have as complete a picture as possible of the two alternatives. One will be selected and an ALP depicting it will be submitted to the FAA. The graphic to the left summarizes the upcoming Dual Track process.