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Transforming Challenges into Solutions



Kotzebue Airport Master Plan Update Stage I – Relocation Feasibility Study

As with most airports in rural Alaska, Kotzebue's Ralph Wien Memorial Airport is an essential feature in the lives of everyone in its community, providing the primary means of transportation for passengers, mail, and cargo throughout the year. In addition, it is the regional hub serving the entire Northwest Arctic Borough, the Red Dog Mine, and the North Slope Borough village of Point Hope.

Located immediately adjacent to the city of Kotzebue, the airport has two runways, one situated on the Kotzebue spit and the other extending out into the lagoon. Providing operational efficiency and an acceptable level of safety at this very constrained site is challenging, and may become impractical in the future. However, relocating this airport would also be a serious undertaking, because transition to a new site would be extremely expensive. Any expansion or relocation effort would therefore need to be backed up by a well-executed aviation master plan with the support of all stakeholders and the public.

The relocation feasibility study examined potential relocation sites, as compared to expansion at the existing site, to determine the cost of development and impacts of relocation. As the first step towards a full update of the Kotzebue Airport Master Plan, the study included identification of issues, inventory of existing conditions, aviation activity report and forecast, establishment of facility requirements, alternatives development and analysis, financial analysis, and feasibility recommendations.

From the standpoint of environmental impacts and land availability, relocation seemed to be feasible; however, the economic outlook made a strong case against either relocation or significant improvements to the existing facility. Due to the monumental costs of either constructing a new airport on another site (ranging from an estimated \$760 million to \$1.2 billion) or making major improvements to the existing airport (estimated at \$560 million), the final report recommends keeping the airport functional through incremental safety enhancements.

The next step is to plan for economically feasible upgrades to the existing airport. The recommended strategy for determining which improvements are feasible is to establish reasonable funding levels for the next 20 years or beyond, then develop an improvement plan to meet funding. This would require careful consideration and discussion with FAA and the major air carriers to prioritize improvements. The improvement plan would guide aircraft size and the number of operators the improved facility could reasonably serve, and then assess the impacts of using smaller aircraft on Kotzebue and surrounding communities.

Client:

State of Alaska
Dept. of Transportation
& Public Facilities
Northern Region

Location:

Kotzebue, Alaska

Project Completion:

2008

PDC Involvement:

- Aviation Planning
- Pre-NEPA Review

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