6 FINANCIAL ANALYSIS

The contents of this section were taken from Northern Economics, Inc.'s report *Financial Effects of Relocating the Kotzebue Airport*, prepared for PDC and DOT&PF in November 2007. References and attachments from that report are provided in Appendix E.

6.1 Overview

This report describes the expected effects of relocating Kotzebue's Ralph Wien Memorial Airport on the financial conditions of air carriers and local businesses. There may also be burdens and enhancements on households in the community as a result of the relocation, but the examination of those effects is outside the scope of this analysis. In addition, the report presents traditional and innovative means of financing the airport relocation and identifies those financial arrangements with the greatest potential for success.

The primary source of information for describing the expected financial effects of relocating the airport is a survey of selected local businesses in Kotzebue and air carriers that operate from Ralph Wien Memorial Airport. The surveys provide mixed results about whether the airport relocation would be beneficial or harmful for business. Since expected effects vary, the analysis focuses primarily on estimating the additional travel costs businesses and air carriers would face. Other potential effects are discussed qualitatively.

The estimated upper limit of additional travel costs for air carriers and local businesses created by relocating the airport five miles outside of the community is about $479,000 annually. This upper limit for the burden grows to over $1.26 million per year at a distance of 15 miles. These estimates are upper limits because they mostly assume that businesses will continue to make the same number of trips to and from the airport each year, regardless of the distance. The exception to this assumption is how the analysis treats restaurants that deliver to the airport, which are assumed to cut back the weekly trips from 50 to 20 as the distance to the new airport increases to 15 miles.

It is likely that if the airport moved, a business opportunity to provide transportation to and from the airport would develop. Such a business could shuttle food, cargo, and passengers to and from the main community. Given a change in operations, it is highly unlikely that the existing, expensive mode of doing business would persist if the airport moved. To the extent possible, travel would be consolidated to reduce costs.

After adapting operations to reflect a new business environment, the remaining costs are expected to be passed on to customers either directly or indirectly. Examples of how costs could be passed on to end customers include the following: If air carriers face increased costs from operating out of Kotzebue, it is likely cargo and ticket prices would be increased to cover the difference. A business that sells products flown in or out of Kotzebue might have to increase prices because of increased cargo prices and ground travel costs. Restaurants that provide food delivery may increase the cost of their food, add a delivery fee, require a minimum order for delivery, or perhaps restrict delivery to peak times when multiple orders can be delivered simultaneously. Other types of burdens are

more difficult to quantify until more is known about the operations and design of the proposed new airport. For instance, if the airport is relocated further from the City, more resources may be required to ensure airport security and maintain roads.

The financial enhancements associated with this relocation are less easily assessed than are the financial burdens, primarily because there are few quantitative sources of data that can be used to indicate the enhancements. Survey results provide some information about enhancements, but there were insufficient responses to make conclusive findings. For example, a common theme heard from the community is that there is a shortage of land. Relocating the airport may provide needed land in the center of town, although the effect of this cannot be readily quantified. Several uses for the existing airport land were suggested in interviews and survey responses. Residential development was identified as a primary need, but commercial, warehousing/storage, and recreational needs were also identified. Relocating the airport would also allow more efficient aircraft service in Kotzebue, which could result in lower air cargo rates.

The analysis concluded with a review of potential funding and financing sources for the airport relocation. According to cost estimates prepared by PDC (Appendix D), the costs of moving the Kotzebue airport (including initial construction, user relocation, and land acquisition) are staggering, ranging from $760 million to more than $1.2 billion. The lower cost estimate is 4.6 times DOT&PF's 2008 capital budget request for airports, and the higher cost estimate exceeds DOT&PF's proposed 2008 overall capital and operating budgets combined (DOT&PF, 2006). To finance such a large effort will require a financing strategy that draws on every possible avenue for financing ranging from federal to state grants, bonds, enactment of the passenger facility charges, selling or leasing current airport facilities, new leases at the new facilities, and shared facilities and services, along with significant federal and state earmarks.

6.2 Financial Effects of Airport Relocation

This section discusses the estimated financial effects of the proposed airport relocation, including one-time capital effects and operational effects. The analysis is based on survey data collected from the community and focuses on local businesses and air carriers. After describing the methods and providing an overview of the survey results, this section of the report extrapolates the survey results to the entire population of affected businesses and air carriers.

The financial burdens associated with this relocation are more easily assessed using available information than are the financial enhancements. Survey results provide some information about enhancements, but there were insufficient responses to make conclusive findings. While this report primarily focuses on burdens, the potential enhancements should not be overlooked. For example, a common theme heard from the community is that there is a shortage of land. Relocating the airport would provide needed land, although the effect of this cannot be quantified. Qualitative discussions of financial burdens and enhancements are found throughout this section and Section 6.3, where potential reuse is discussed.

6.2.1 Methodology

The primary source of information for describing the expected financial effects of relocating the airport is a survey of selected local businesses in Kotzebue and air carriers that operate from

Ralph Wien Memorial Airport. Northern Economics focused its interview and survey process on those businesses that would most likely be affected by a relocation of the airport. This included air carriers, hotels, restaurants, and other major businesses in the community that have a significant level of interaction with passengers or airport-related businesses.

The interviews and surveys were conducted in March and April 2007. Initial surveys were conducted as face-to-face, personal interviews by Northern Economics consultants in March 2007, guided by the survey questionnaire. After the initial interviews, surveys were sent to a hand-picked sample of other businesses in the community so as to achieve a representative sample of businesses that were deemed likely to be particularly affected by a relocation of the airport. The air carrier and local business surveys are shown in Appendix E.

Four of the 11 airlines or air cargo companies currently operating out of Ralph Wien Memorial Airport were surveyed, and 12 local businesses in Kotzebue were surveyed. Of those surveys, four air carriers and five local businesses were interviewed. The other 8 surveys resulted from a mailing to 21 businesses and carriers. Again, the businesses were chosen as a representative sample of those that would be most affected by an airport relocation. Therefore, while the response rate to the mailed survey was high, it does not mean the results can be used to infer statistically the effects on all businesses. Instead, this report presents the results of the survey with the expectation that responses are generally representative.

.**Table 6-1 – Number and Types of Businesses in Kotzebue Surveyed**

Type of Business	Total Number of Businesses	Number of Businesses Surveyed
Utilities	1	1
Construction	4	2
Wholesale and Retail Trade	9	3
Information	5	2
Accommodation and Food Services	7	3
Other Services	9	1
Total	**35**	**12**

The four air carriers interviewed and surveyed were fairly representative of the different sizes and types of air carriers at the airport. With respect to local businesses, the survey focused on those types of businesses that would have the greatest potential of being affected by relocating the airport. These were businesses involved in utilities, construction, wholesale and retail trade, information, and accommodation and food services. Table 6-1 shows the number of each type of business surveyed. The one business categorized as "other services" is a rental and storage firm. The total number of businesses with local addresses in these categories is 35.

6.2.2 Summary of Qualitative Survey Results

The summary of interview and survey results first describes the responses of non-aviation related businesses, and then describes the responses of air carriers. Non-aviation businesses are those which operate in the community and are not directly related to the airport, yet have a reasonable potential for being indirectly affected by airport operations. Overall, businesses not directly tied

to the airport indicated that they would not make major changes in the way they do business. The primary impact to these businesses would be the increased travel costs resulting from the additional distance to the new airport. However, other than the increased travel costs, businesses overall did not anticipate major changes in their revenues and expenses. In general, air carriers indicated that they would continue operating normally if they were relocated to a new airport location. While some expressed concern about employee transportation to and from work, most believed that employees would adapt and there would be no change in the long run.

More detail about the qualitative survey results is found in Appendix E.

6.2.3 Potential Financial Effects

Potential effects of relocating the airport on the operations of air carriers and local businesses include changes in:

- Costs of business-related trips between the airport and the city
- Employee recruitment and retention
- Costs of goods that are flown in or out of Kotzebue
- Number of customers and total sales

Only the expected increase in the annual costs of business-related trips between the airport and the city could be quantified based on the information collected in the survey. Table 6-2 summarizes these costs if the airport were to be relocated 5, 10, or 15 miles from its present location. The table shows the estimated impact to all businesses combined, on an annualized basis. More information about the process of calculating these impacts follows in the next two sections on air carriers and local businesses.

Table 6-2 – Estimated Upper Limit of Additional Annual Travel Costs for Air Carriers and Local Businesses

	Additional Cost of Trips Between the City and Airport, Annually		
	5 miles from Present Location	**10 miles from Present Location**	**15 miles from Present Location**
Air Carriers	$ 82,500	$165,100	$ 247,600
Local Businesses	$396,600	$711,900	$1,014,800
Total Costs	**$479,100**	**$877,000**	**$1,262,400**

Source: Survey data and Northern Economics, Inc. calculations

The additional travel costs shown in the table represent an upper limit of the estimate, because it is likely that air carriers and businesses would seek to reduce the total number of trips made to and from the airport.

Insufficient responses were available to make any conclusions about the effect of relocation on revenues overall or by industry.

In addition to the operational cost effects of relocating the airport, businesses may also face capital costs associated with building new store locations or relocating closer to the airport. If the airport is relocated, air carriers would have to invest in new capital infrastructure, including, warehouses, hangars and fuel storage facilities, at the new location. Based on initial cost estimates, leaseholders

would incur expenses of up to about $22.8 million, based on the value of leaseholder improvements at the current airport (Appendix A). Additionally, DOT&PF would incur relocation expenses of approximately $14.7 million (Appendix D). More information about relocation costs is shown in Section 6.2.4.

The next two sections discuss the effects on air carriers and local businesses.

6.2.4 Effects on Air Carriers

Operations

Potential effects on the operations of air carriers can be divided into three categories:

- Change in costs of business-related trips between the airport and the city
- Change in employee recruitment and retention
- Change in number of customers and revenues

Each day employees of the air carriers with offices or other facilities at the airport make trips between the airport and the city to drop off or pick up passengers or cargo or to conduct some other business-related activity (e.g., go to the bank or post office). Based on survey information, the average number of trips is 4.5 per day, or about 32 per week. Usually one or two employees make the trip. The duration, and therefore the employee cost, of each trip varies by carrier. The carriers interviewed indicated that trips take anywhere from a few minutes to an hour, with an average duration of about 30 to 35 minutes and an average labor cost of about $24 per hour.

Relocating the airport outside of the community would increase the costs of these business-related trips in terms of fuel usage, vehicle wear and tear, and employee time. For each additional mile of travel, the trip cost is expected to increase by $1.28, assuming 30 mph travel, an hourly labor rate of $24, and the 2007 standard mileage rate for travel of $0.485 per mile (IRS, 2006). Therefore, for each additional mile of travel the additional cost per air carrier is calculated to be $5.76 per day or $2,098 per year.

Applying this additional cost to the potential airport relocation sites suggests the additional annual cost for business trips for each of the air carriers interviewed would range from $18,900 to $21,900 if the airport was relocated 5 miles from its present location, depending on the size of the air carrier. Based on the interview findings, smaller carriers, classified as air taxis, would likely experience lower travel cost impacts because of different trip patterns to and from the airport. The larger carriers, due to a tendency to make longer trips, would have a higher travel cost for trips to and from the airport. The estimated travel costs by air carrier type and the distance to the new airport location are shown in Table 6-3.

Table 6-3 – Weighted Average Annual Travel Cost Impacts for Air Carriers

Type of Air Carrier	Distance to New Airport Location		
	5 miles	10 miles	15 miles
Air Carrier (larger aircraft)	$21,923	$43,845	$65,768
Air Taxi (smaller aircraft)	$18,926	$37,852	$56,778

Source: Northern Economics, Inc. interview findings and analysis

Based on the annual operations of air carriers, air taxis, and other aircraft, the air carriers interviewed by Northern Economics represent 36 percent of the total air carrier (larger aircraft) operations and 90 percent of the total air taxi (smaller aircraft) operations.

Based on the percentage of operations accounted for in the interviews, the analysis extrapolates to determine an estimate of the additional annual cost for business trips for all air carriers would be $82,500, $165,100, or $247,600 if the airport was relocated 5, 10, or 15 miles from its present location, respectively. In general, the effects of these additional trip expenses on the financial condition of most of the individual air carriers would be minimal because the increased costs represent a small share of air carrier operating costs.

These estimated travel costs assume the air carriers would continue to operate as they have done in the past, namely to take multiple, short trips into the community. It is likely that air carriers would attempt to reduce the number of trips made each day in order to offset the increased cost for travel. Therefore, these travel cost estimates represent an upper limit for the estimated financial impact on air carriers from airport relocation.

Many Kotzebue residents do not own cars and walk to work because the community covers such a small geographic area. If the airport is relocated outside of the community, air carriers may experience problems with worker turnover or recruitment due to the increased difficulties for air carrier employees to get to work. At this time there is insufficient information about ground transportation options for Kotzebue commuters to estimate the magnitude of this effect. It is an issue that should be considered in greater detail as the assessment of relocating the airport progresses. For example, if sufficient demand for transportation exists, the air carriers, a startup business, or the City of Kotzebue might consider operating a shuttle to transport people between the airport and the city.

Relocating the airport could also change the demand for air carrier services by Kotzebue residents. There are two competing forces behind this potential change. First, as travel times increase to drive to and from the airport, some prospective airline customers (specifically those passengers who are sensitive to travel costs or lack transportation) may be discouraged from taking a flight. This could affect both passengers flying out of Kotzebue and passengers flying in from villages for short visits in the community.

On the other hand, a new, expanded airport may make it possible for more efficient aircraft service in Kotzebue in the future, thereby potentially improving air routes, schedules, and fares. This could potentially benefit local residents by reducing the cost of travel into and out of Kotzebue, which could increase the frequency of travel.

These competing forces cannot be quantified from the information available from surveys or other existing sources. Therefore, it is not possible to estimate the impact of airport relocation on potential changes in routes, fares, and schedules, except on a qualitative basis. If relocation continues to be considered, focused surveys of air carriers and regional residents might provide better information to determine how passenger counts and revenues could change.

Capital Expenditures

Building an airport at a new location means that air carriers would have to invest in new capital infrastructure, including, warehouses, hangars, and fuel storage facilities at the new location. PDC estimates leaseholders would incur up to $22.8 million, based on the estimated value of leaseholder improvements at the current airport. DOT&PF would also incur $14.7 million in relocation expenses.

6.2.5 Effects on Local Businesses

Operations

Potential effects on the operations of local business can be divided into the following categories:

- Change in costs of business-related trips between the airport and the city
- Change in procurement costs
- Change in number of customers and revenues

All twelve of the non-aviation businesses that were interviewed or responded to surveys consider themselves to be located near the airport, which generally means travel times of 2 to 4 minutes in a vehicle. This reflects the fact that the community is approximately one mile long, so all locations are within a mile of the airport. Some of the businesses surveyed are also within a short walking distance, which is a common mode of transportation in the community. While none of the businesses expected a relocation of the airport to force them to move or shutdown, about 33 percent indicated it is very important to be located near the airport, while around 58 percent stated it is somewhat important. Only one business stated that being near the airport was unimportant.

As with the air carriers, employees of local businesses make business-related trips between the airport and the city. The purpose of these trips and the effect of relocating the airport on trip costs varies depending on the type of business. Some local businesses provide goods and services to the airport such as aviation fuel. Most businesses in Kotzebue make trips to the airport to pick up or drop off air freight. A number of service-related businesses rely on the airport for seasonal or year-round inter-regional travel. Food service establishments make frequent trips to the airport to drop off meals to airline passengers and air carrier employees.

The analysis of travel cost impacts to businesses follows the same process used with air carriers— i.e., quantify the employee wages or salaries associated with travel to the airport, as well as mileage-based vehicle wear and tear. Again, the assumption is that the number of trips to and from the airport remains the same and does not decrease as the distance increases. In the case of businesses, however, the analysis includes one exception to this assumption, which is for restaurants that provide delivery to the airport. This analysis has accounted for some reduction in the number of take-out orders as a result of having to travel greater distances, based on the assumption that at a certain point businesses would need to start charging a delivery fee to cover costs. If the airport is relocated up to five miles away, the analysis assumes delivery businesses will continue to make about 50 deliveries per week to the airport. The number of deliveries is assumed to drop to 30 per week if the airport is ten miles away, and 20 per week if the airport is 15 miles away.

Table 6-4 presents estimates of the additional annual airport access costs that various types of local businesses would incur if the airport was relocated 5, 10, or 15 miles from its present location. As with the change in air carrier trip costs, the speed limit was assumed to be 30 mph and the standard mileage rate of $0.485 per mile was used.

Table 6-4 – Estimated Upper Limit of Additional Annual Airport Access Costs for Local Businesses

Type of Business	Total Number of Businesses	Average Number of Trips Per Week[1]	Average Labor Cost Per Hour	Number of Employees	Average Weeks Per Year[2]	Additional Airport Access Costs Distance from Present Location 5 miles	10 miles	15 miles
Airport Fuel Supply	1	60	$60	2	52	$138,684	$277,368	$419,796
Other Airport Services	1	10	$55	4	52	$ 40,274	$ 80,548	$121,966
Utilities	1	0.25	$60	2	52	$ 578	$ 1,156	$ 1,749
Construction	4	14	$35	2	12	$ 18,782	$ 37,565	$ 56,818
Wholesale and Retail Trade	7	5	$14	1	52	$ 17,235	$ 34,471	$ 51,961
Information	5	10	$50	2	26	$ 49,205	$ 98,410	$148,915
Accommodation	2	9	$40	1	52	$ 16,895	$ 33,790	$ 51,059
Food Services	5	50/30/20 30 20	$ 9	1	52	$101,660	$121,992	$122,460
Other Services	9	3	$14	1	52	$ 13,296	$ 26,592	$ 40,084
Total Costs						**$396,609**	**$711,891**	**$1,014,808**

Source: Survey data and Northern Economics, Inc. calculations

[1] For food service businesses it is assumed that the number of trips would vary from 50 to 20 each week, depending on the distance from the airport.

[2] Trips to the airport for some businesses are concentrated during the summer months.

The estimated travel costs shown in Table 6-4 represent an upper limit. It is likely that if the airport moved, that a business opportunity to provide transportation to and from the airport would develop. Such a business could shuttle food, cargo, and passengers to and from the main community. Given a change in operations, it is highly unlikely that the existing, expensive mode of doing business would persist if the airport moved. To the extent possible, travel would be consolidated to minimize the burden associated with the new operating environment.

Relocation of the airport could result in a reduction in business procurement expenses. The ability of a new, expanded airport to accommodate more efficient aircraft service may result in lower air freight rates, notwithstanding any increases in fuel costs or other factors, thereby decreasing the costs for Kotzebue businesses to obtain inventory and other items from outside suppliers. However, actual use of this new capability at a relocated airport by aircraft operators is uncertain. Similarly, it is difficult to anticipate how airlines may change their mix of aircraft types and route structures in response to greater flexibility. Consequently, at this time there is insufficient information on the potential change in air cargo rates to estimate the amount of costs savings to local businesses.

Air shipments of chum salmon harvested in the Kotzebue area occur daily in July and August. The Kotzebue Sound Fisheries Association, which manages the local fish processing operation, expressed concern that the added cost of transporting fish to an airport located far from town

would raise the cost of its fish sold in Anchorage markets. (DOT&PF, 2006) The added costs would make it more difficult for Kotzebue fish to compete in those markets. However, these additional costs may be offset to some extent if, as discussed above, the construction of a new airport results in lower air cargo rates and not accounting for any increases in fuel costs.

Local businesses providing ground transportation services, such as taxis, are likely to experience an increase in customers if the airport is relocated. As noted above, many Kotzebue residents don't own a vehicle and prefer to walk most places, and few, if any, tourists and other visitors rent a car because of the limited road system. Additional transportation options may become available once businesses adapt to the new operating environment.

Some local businesses providing goods and services to airline passengers may receive fewer customers. For example, outgoing passengers may find it less convenient to make a final stop at local restaurants, general merchandise stores, or other local firms before their departure. Many individuals order food while sitting in the Ralph Wien airport and receive their orders within 10 to 15 minutes in most cases. If costs increase or the amount of time it takes to receive food increases, customers may change their purchasing habits. To estimate these impacts, additional information on the shopping preferences of these passengers is needed.

This analysis focuses on the impacts of relocation on businesses in Kotzebue and does not directly consider the effects on individuals. However, it is reasonable to assume that businesses will increase prices in order to pass on any increases in their expenses resulting from the airport relocation. Examples of how costs could be passed on to end customers include the following: If air carriers face increased costs from operating out of Kotzebue, it is likely cargo and ticket prices would be increased to cover the difference. A business that sells products flown in or out of Kotzebue might have to increase prices because of increased cargo prices and ground travel costs. Restaurants that provide food delivery may increase the cost of their food, add a delivery fee, require a minimum order for delivery, or perhaps restrict delivery to peak times when multiple orders can be delivered simultaneously.

If the airport is relocated further away from the main community of Kotzebue, individuals and businesses will adapt. Most businesses that were interviewed or responded to a survey indicated they would do nothing. However, it is likely that the reason the current situation in Kotzebue exists —in which goods and services not directly related to air travel are provided in the main community and not on the airport property—is due to the fact that the airport is located directly in town. If the airport moves, there will be demand for food, transportation, and other goods and services at the airport and it is very likely that businesses will step in to provide that service at the new location.

Capital Expenditures

As noted above, none of the non-aviation businesses surveyed expected a relocation of the airport to force them to move to the new airport site. However, some businesses indicated that they would possibly open a new branch near the new airport. Specifically, a local fuel distributor and general merchandise store expressed interest in establishing additional branches. If profitable, these capital investments would mitigate some of the operational costs incurred by those businesses from the airport relocation.

In addition, an electrical utility provider noted that electric power lines would have to be installed at the new airport. These connection costs would increase proportionally with the distance of the new airport from the city supply. The costs of running a power line to a remote site to connect with the utility grid are estimated to be about $150,000 per mile. The installation of electric utilities as well as water, gas, drainage and wastewater treatment facilities may be eligible for Airport Improvement Program funding (FAA, 2005).

6.3 Potential for Re-Use of Airport Land

If DOT&PF relocates the Ralph Wien Memorial Airport to another location outside of the community, the current airport land may become available for other uses. This section considers land ownership of the current airport site, followed by potential types of reuse for that area.

The airport property consists of 1,805 acres of water and land. Approximately 80 to 85 percent of the airport property is water, leaving 270 to 360 acres of land, some of which would be available for reuse. Notable areas that would not be available for reuse include the beach area, which would still be used traditionally; the old landfill site; and the sewage lagoons. The main developed area of Kotzebue, namely the area to the north and northeast of the current airport, is approximately one-half square mile, or about 320 acres. Therefore, if the current airport land were made available for development, it could likely increase the size of the presently developed area by two-thirds or more.

6.3.1 Land Ownership

Reusing the current airport site could present substantial challenges. The current airport is on land that is suspected to be heavily contaminated, which could make the land unfit for residential purposes and could be expensive to mitigate. Some of the existing buildings and lease facilities are likely to be condemned and therefore represent an additional liability associated with the property. Because of these challenges, DOT&PF is expected to have challenges and delays in disposing of the current airport land.

DOT&PF could dispose of the current airport land through a sale, either directly to users or through another organization such as the City, Borough, or NANA. However, remediation costs would likely use up most of the revenues DOT&PF could generate from the sale. The sale would also need to adhere to any conditions for use of or disposal of the land. Alternatively, DOT&PF could lease the land to other users. The challenge with leasing is that specific conditions on the airport land may affect DOT&PF's ability to lease the land. There may be restrictions on the development of airport-owned land and the use of the revenue from that land that are driven by the grant assurances airports accept as a condition of receiving grants or acquiring federal surplus property (Transportation Research Board, 2007). If DOT&PF intends to lease land, a thorough review of any applicable grant conditions would be necessary to ensure the leasing conforms to requirements.

The transition plan for transitioning to the new airport site will also affect the disposal or lease of the current airport land. The current airport would need to continue operating until the new airport is fully functional.

Because of the transition time, heavy contamination of the existing airport land, and the potential for restrictive conditions, the land disposal process is anticipated to be difficult, slow-moving, and uncertain in terms of the financial gain or loss experienced by DOT&PF from disposal.

6.3.2 Potential Types of Re-Use

Potential types of land reuse fall into five categories:

- Residential
- Warehousing and storage
- Commercial
- Recreation
- General aviation

The following subsections discuss each of these types of reuse. The discussion is based on survey results and interviews with officials from the City of Kotzebue, Northwest Arctic Borough, NANA Regional Corporation, Kikiktagruk Inupiat Corporation (KIC), and Maniilaq Association.

The discussion in this section represents preliminary findings on how to reuse the land. If the existing airport land is available for reuse, several issues will need to be decided, such as ownership of the land, suitability of the land for the proposed uses, the amount of land needed for each type of development, compatibility of different uses, and the community interest in different types of use.

Residential

One of the challenges faced in Kotzebue is the lack of developable land for housing. In interviews with officials from the City of Kotzebue, Northwest Arctic Borough, NANA Regional Corporation, KIC, and Maniilaq Association, there was general agreement that the land could be used for housing, possibly with some commercial uses mixed in. Kotzebue has many young families who have no place to buy land. Further, organizations such as Maniilaq provide housing for employees and have a shortage of suitable housing.

Despite the general feeling about the lack of availability of land, there are other areas in the community where residential development could take place. Ted Stevens Way and the BIA road were built for the purpose of providing access to and room for community growth. The airport land has the benefit of having access to utilities, but land on the hillside is available. KIC has expressed an interest in developing a subdivision in the area to provide shareholders with an opportunity to own land.

The challenge with reusing the current airport land for housing is the suspected heavy contamination present in the ground. Residential development would require a substantial remediation effort, the cost of which has not been determined.

The 2000 Census reported a population of 3,082 people and 889 households in Kotzebue (U.S. Census Bureau, 2000), with an average household size of 3.47 people. Population projections to 2055 suggest Kotzebue could grow to 4,000 to 4,700 people, increasing the demand for housing to 1,150 to 1,350 units. If sufficient airport land is suitable for development, with an average of about 10 houses per acre (including both single family homes and group housing), approximately

25 to 50 acres of the airport land would be sufficient to handle the projected growth in housing demand through that period. With group housing, the amount of land required to provide the same number of households would be much lower. Depending on housing needs, the land owner could determine the optimal amount of land necessary to provide housing.

It is likely that increasing the amount of housing by a large amount would reduce existing housing and land values, but it is difficult to predict by how much it would change, because this would represent a structural change in the housing market rather than a marginal change. If the new owner/developer of the land is a quasi-public agency, then it would be in their interest to offer housing at reasonable prices while not deflating existing house prices.

Prices for houses in the community depend on several factors, such as the availability and price of land, the availability of and demand for housing, and the cost of materials delivered to the region. A recently constructed senior housing facility cost about $475 per square foot to build according to discussions with government and tribal officials while consultants were in Kotzebue in March 2007. At that same time, the asking price for a new, 1,200-square-foot house was approximately $280,000.

According to information collected by the City of Kotzebue, several houses are currently for sale in the community. Beach frontage property is currently selling for about $7 per square foot, while other land is about $5 per square foot. Two new houses built in the last year sold for about $232 per square foot. (Westlake, 2007).

Another potential reuse of the land for residential purposes would be to lease the land, either as-is or with newly-constructed houses or group housing. Unlike businesses, individuals would likely prefer to avoid leaseholder improvements and would therefore prefer to rent an apartment or buy land, rather than build a new home on leased land. The exact arrangements would need to be determined based on the ability of the department to lease land for residential use.

Warehousing and Storage

The lack of available land in Kotzebue has led to warehousing and storage space being priced at a premium. If existing airport land became available for this use, businesses could construct self-storage facilities, warehouses for local businesses, and other structures to meet the community's needs.

For a community the size of Kotzebue, the amount of warehousing space would likely be very small. In 2002, Alaska had 21 warehousing businesses, equal to one per 30,500 people. In Anchorage, there are only 18,000 people per warehousing business. Therefore, even with a large amount of growth, Kotzebue likely would not need a large amount of warehousing space as the population appears to be insufficient to support a warehousing business.

The two primary users of warehousing and storage would be businesses and individuals. Businesses could store raw materials and products in private warehouses. Individuals and households could store household goods, equipment, and other items in a self-storage area. Depending on the demand, a few acres of less desirable land could be sold from the land owner to businesses needing commercial warehousing space.

Commercial and Government

Some local businesses expressed an interest in using the existing airport land for commercial operations. One business in the community indicated an interest in building a new, larger facility on the airport site than what it currently owns, citing sufficient demand to allow for the expansion. Another business said it would be interested in building support infrastructure, such as a warehouse, on the airport land. Interviews with government and tribal entities suggested the land could also be used for industrial purposes.

The City of Kotzebue has expressed an interest in reusing some of the structures on the airport property on their fairgrounds near Swan Lake. The city plans to upgrade and expand the fairgrounds as a community park.

The airport land could also be used to generate and sell energy to the local electric utility and/or property tenants at a net profit. For example, electricity from wind sources could be generated on the property. Kotzebue Electric Association installed Alaska's first utility wind farm in 1997. The 148-acre project site is located on land leased from Kikiktagruk Inupiat Corporation. Currently, ten 66-kW and one 100-kW turbines produce about 1.2 million kilowatt-hours of electric energy. KEA is working toward an eventual 2 to 4 MW of wind generation capacity, which will be sufficient to meet the community's electrical needs at peak load (KEA, 2007).

One business survey respondent suggested the existing airport land could be used for a new community landfill. While this study has not considered the community's landfill requirements, use of airport land for a new landfill is something the city or borough could consider in the future.

Recreation and Subsistence

Several of the individuals who were interviewed or surveyed suggested recreational uses for the existing airport land. Individuals already use the airport property to access the tent city and areas for hunting, fishing, and other traditional activities. In addition to supporting these uses, suggestions for recreational uses included recreational and drag racing, recreational shooting, and softball.

General Aviation

One alternative to a complete relocation of the airport is to relocate commercial air operations to a new airport, while allowing general aviation operations to continue operations at the existing airport. If general aviation operations continued at the existing airport site, the amount of land available for other uses would be reduced substantially based on safety and security requirements. Continuing general aviation operations would likely reduce the lease revenues available to DOT&PF, both because of the reduced amount of land available for other uses and the lower lease rates for aviation versus non-aviation uses (17 AAC 45.127).

Operating and maintaining two airports would be prohibitively expensive, as it is likely that the city or borough would be given responsibility for operating and maintaining the general aviation airport while DOT&PF would operate the new airport, leading to inefficiencies of scale. Therefore, it seems prudent that all air operations would be transferred to the new airport location. If the existing airport land were sold or swapped to a new owner, the new land owner of the existing airport site would have the option of operating a general aviation airport.

6.4 Methods for Financing Airport Construction

6.4.1 Recommendation

The estimated costs of moving the Kotzebue airport are staggering, ranging from $760 million to more than $1.2 billion. To finance such a large effort will require a financing strategy that draws on every possible avenue for financing, including from federal, state, and corporate grants, enactment of the passenger facility charges, selling or leasing current airport facilities, new leases at the new facilities, and shared facilities and services along with significant federal earmarks. Private donations by the community might also be a possibility. However, the recent public outcry over "bridges to nowhere" suggests that federal earmarks for this amount of money would be met with resistance and difficult to acquire. The total estimated costs of both these two bridges are less than $1.2 billion.

The FAA estimates that the total cost of airport development projects nationwide eligible for AIP funding will be about $8.2 billion per year from 2007 through 2011 (GAO, 2007). It is difficult to imagine that in the current political environment that one eighth of the annual budget for airport development could go towards a small airport in Alaska.

The lower cost estimate for a new facility is 4.6 times DOT&PF's 2008 capital budget request for airports, and the higher cost estimate exceeds DOT&PF's proposed 2008 overall capital and operating budgets combined (DOT&PF, 2006). It is more than $100,000 per resident in the Northwest Arctic Borough.

6.4.2 Introduction

This section reviews potential financing and funding alternatives for moving and rebuilding the Kotzebue airport. Airports rely on a variety of funding sources, both public and private, to finance capital development. The section starts with a set of recommendations. Next is a brief overview of common capital funding sources used by airport operators followed by a brief discussion of how these approaches may apply to Kotzebue.

Transportation funding is a major issue across the U.S., but in Alaska it is a particular concern because Alaska is highly dependent on air travel. Many communities, including the state capital, are not linked to the national or state road systems. As a result of this statewide transportation need, the Alaska Department of Transportation and Public Facilities (DOT&PF) is the largest airport owner, manager, and sponsor of airports in the entire United States. Alaska has 1,112 designated airports, seaplane bases, and aircraft landing areas. DOT&PF owns and operates 258 public airports, 256 of which are rural and 2 are international (DOT&PF website, 2007). Local governments own and operate another 23 public airports. In the northwest region of Alaska, DOT&PF owns and operates 42 of the 48 public-use airports (DOT&PF, 2004).

The cost of constructing a new airport in rural Alaska is increasing due to rising fuel costs, the cost for mobilization of labor and equipment, labor rate increases, and costs of shipping materials to remote locations. In addition, each construction locale in rural Alaska comes with a set of unique assets and constraints. For example, in Kotzebue there is a lack of quality construction materials for embankment construction and issues related to permafrost soils. The cost for a minimum 3,300-foot gravel airstrip with an apron in Alaska is often more than a 5,500-foot paved, lighted airstrip in the lower 48 (FAA 2000). With costs of construction increasing, DOT&PF must continually look for additional revenue sources to fund capital projects.

A discussion of financing mechanisms is really a discussion of three basic questions: who pays, how much, and when? How funding mechanisms are constructed determines what portion of the infrastructure need is met by the federal government, state and local governments, or others. Funding structure also determines what portion of current need is met by current users and taxpayers versus how much is met by future users and taxpayers.

A recent report issued by the Transportation Research Board (2007) describes innovative finance and alternative sources of revenue for U.S. airports. According to this report, the principal sources of funds for airport capital projects across the nation include the following, cited from largest to smallest:

- Proceeds of bonds and other forms of debt
- Passenger facility charges (PFC) revenues
- Airport Improvement Program (AIP) grants from the Airport and Airways Trust Fund administered by the Federal Aviation Administration (FAA)
- Internally generated capital resulting from retained airport revenues
- State grants and local financial support

Each of these alternatives is discussed below, together with financing mechanisms related to property sales/leases and public/private partnerships. The order of presentation has been altered to more closely reflect the major sources of funds for airport capital projects in Alaska. For example, in Alaska the FAA's AIP is the primary funding source for airport infrastructure development (FAA, 2000).

6.4.3 Federal and State Grants

Federal Aviation Administration's Airport Improvement Program

Funding for the FAA AIP grants programs comes from aviation user taxes and funds are available to airport operators in several forms. In general, AIP funds can be used on most airfield capital improvements or repairs except those for terminals, hangars, and non-aviation development. For small primary, reliever, and general aviation airports, the grant covers most (more than 90 percent) of eligible costs. Types of funding include (Transportation Resource Board, 2007):

- *Entitlement funds*, which are apportioned to primary airports based on levels of passenger traffic and to cargo service airports based on levels of cargo aircraft landed weight, subject to certain minimum and maximum levels. The DOT&PF non-hub primary entitlements total $22,981,085 for FFY 2007 (Maggard, 2007).
- *Small airport funds* are apportioned to general aviation (including reliever) and non-hub commercial service airports.
- *Set aside funds* are dedicated to noise compatibility planning and implementation, the Military Airport Program, and reliever airports.
- S*tate apportionments* are principally apportioned for nonprimary commercial service, general aviation, and reliever airports based on an area/population formula among the 50 states, the District of Columbia, Puerto Rico, and insular areas. In Alaska, Hawaii, and Puerto Rico these amounts may be used at any primary or nonprimary airport in addition to other designated entitlements.

- *Nonprimary apportionments* are apportioned based on the needs for a particular nonprimary airport in the most recently published NPIAS, subject to overall caps.
- *Discretionary funds*, are distributed based on the ranking of the airport's projects in relation to others deemed most important for improving the national airspace system.

As indicated above, allocation of discretionary funds is based on the FAA's national priority system, which is designed to facilitate routine prioritization for the bulk of projects while allowing exceptions to handle special projects and those hard to classify. Alaska's development priority is to bring initial infrastructure to a minimum level of safety and efficiency. This priority does not compete well within the national priority system, which focuses on rehabilitation of the nation's existing system as a high priority. The FAA uses an equation that produces a numerical value between 0 and 100. In general, projects with higher numerical values are most consistent with FAA goals and objectives. For example, priority coding for rehabilitation of an existing airport is 73, while construction of a new airport is 53 (FAA, 2000).

Moreover, the formula used to distribute discretionary funds is based on enplanements, based aircraft, population, and priority distribution of entitlement and state apportionment funds. These criteria do not reflect Alaska's dependence on aviation. Alaska has 2 percent of the national population and 16 percent of all commuter flight hours flown nationally. Its rural airports have virtually no based aircraft, yet they receive a continuous stream of operations daily (FAA, 2000). In addition, the FAA funding formula does not take into account the extra expense due to construction difficulties in rural Alaska (DOT&PF, 2004).

Finally, it is important to note that according to analysis by the Government Accountability Office the FAA's proposed 2007 reauthorization legislation would reduce the size of the AIP by $750 million and increase the amount airports can collect from passenger facility charges (PFCs), but the benefit from increased PFCs would accrue mostly to larger airports and may not offset reduced AIP grants for smaller airports (U.S. Government Accounting Office, 2007). From 2001 through 2005, smaller airports across the U.S. received about $3.6 billion a year (2006 dollars) but GAO estimates that smaller airports will receive a total of about $4 billion spread between 2007 through 2011.

State Grants

The second major source of funding for the Kotzebue airport is state grants, which are used for items such as snow removal equipment or as matching funds for federal grants. Some states provide funding for airport and aviation-related projects in the form of outright grants or matching share for federal AIP grants. Support from local governments usually takes the form of general taxes.

Other state and local governments assist airports by issuing general obligation bonds on their behalf. Those bonds tend to get more favorable interest rates and enjoy better access to bond markets than revenue bonds because they are backed by the jurisdiction's power to impose and increase taxes. In turning to state and local governments for aid, however, airports must compete with a wide range of other projects such as school buildings, prisons, parks, and sports stadiums.

In terms of the Kotzebue airport, most of the money for projects comes from FAA and is allocated by DOT&PF.

6.4.4 Proceeds of Bonds and Other Forms of Debt

This section discusses the use of bonds and other forms of debt because these are major funding sources at the national level and in Alaska for some capital projects. While many airport operators are major and regular participants in the municipal bond markets, the options for Kotzebue may be limited as discussed in the final paragraph. Debt service associated with bonds issued for airport capital needs can be supported by the overall tax base of the issuing entity, general airport revenues, passenger facility charge revenues, future AIP or state grants, revenues generated by the facility constructed with the bond proceeds, other revenues, or any combination thereof.

Most large and medium hub airports have long-standing experience in issuing bonds to finance their capital investments. Many smaller airports have also succeeded in issuing bonds for that purpose. Some smaller airports mimic their larger counterparts in issuing revenue bonds—bonds backed by revenues from user charges. Others find that potential lenders insist on additional backing from tax revenues; in those cases, the airports typically ask a local governmental body to issue general obligation bonds—bonds backed by the government's power to impose taxes—on the airport's behalf.

Airports can benefit from the fact that their bond issues generally qualify as municipal bonds, making their interest exempt from federal income taxes. As a result, airports can borrow at lower interest rates than if the bonds were subject to federal taxes. Because investors will purchase bonds that yield the highest returns after taxes, bonds issued by airports can attract buyers.

According to the U.S. Government Accounting Office (2007), a FAA study found that "small airports consistently draw interest costs below the average for municipal bonds in general...and below the interest costs incurred by larger airports." That finding could result from several factors. First, small airports are more likely than large ones to issue general obligation (rather than revenue) bonds, and general obligation bonds tend to carry lower interest rates than revenue bonds because the former are backed by the taxing powers of a government unit. But small airports may get lower interest rates even on revenue bonds. That is because small airports tend to serve passengers whose origin or destination is that airport, in contrast to larger airports that serve many passengers making connections to other points. Second, lenders generally consider the passenger base at airports where passengers typically begin or end their trips to be more stable than at airports where passengers typically make connections because the latter group of passengers could choose other airlines that connect through different airports. Third, in some cases, an airline has abandoned a hub, reducing connecting passenger traffic and therefore revenues to the airport. Finally, the report states that smaller bond issues "are naturally less risky" than larger ones, and "the average sized bond issue among small airports over the 1985 to 1995 period was less than one-quarter the average sized large airport bond issue." The report also noted that no airport bond has ever defaulted.

Bonds for capital projects must be backed either by dedicated revenue from a specific tax or project or by the credit and "taxing power" of the issuing jurisdiction rather than the revenue from a given project. For example, in the case of Kotzebue, the city or borough could attempt to issue a $600 million bond for redevelopment of the airport. If that bond had a 20-year term and 5 percent interest, the coupon payments would be $30 million per year, in addition to monies set aside to pay the principal at the end of the 20-year term as well as to meet coverage ratios.

However, as discussed in the following sections, the current airport operates at a loss, which has been growing annually.

6.4.5 Passenger Facility Charges

The Aviation Safety and Capacity Expansion Act of 1990 provided airports with an additional source of funding for capital projects in the form of Passenger Facility Charges (PFCs). Under this Act, PFCs may be used as a source of funding for airport-related projects that preserve or enhance safety, capacity, or security of the national air transportation system; reduce noise from an airport that is part of the system; or furnish opportunities for enhanced competition between or among air carriers.

The Aviation Safety and Capacity Expansion Act authorizes a public agency to impose a PFC of $1.00, $2.00, or $3.00 per enplaned passenger at commercial airports it controls. The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, which was enacted in 2000, included authorization to charge a PFC at the $4.00 and $4.50 levels provided specific eligibility requirements are met. The FAA's proposed 2007 reauthorization legislation would increase the amount that airports can collect from PFCs to $6.00 per passenger.

As in the case of operating surpluses, PFC revenues are: (1) used on a "pay-as-you-go" basis, where PFC collections and interest earnings are spent directly on capital projects, and/or (2) leveraged; that is, used to pay debt service on bonds. Airport operators must obtain an approval from FAA before they begin the collection and use of such revenues. The DOT&PF has the authority to impose a PFC subject to federal regulations. However, federal legislation prohibits a public agency from imposing a PFC on any passenger 1) on any flight to an eligible point on an air carrier that receives essential air service compensation on that route. The Administrator makes available a list of carriers and eligible routes determined by the Department of Transportation for which PFCs may not be imposed under this section; 2) on enplanements in Alaska aboard an aircraft having a certificated seating capacity of less than 60 passengers.

As of June 1, 2007, 225 small hub, non hub, and commercial service airports are approved to collect at the $4.50 PFC level and 51 large and medium hub airports (FAA 2007). In Alaska, four airports are currently collecting PFCs: Juneau International, Fairbanks International, Anchorage International, and Ketchikan International. For the Kotzebue airport to qualify to collect a PFC, it would have to petition the FAA. There are several requirements that would have to be met, including, for example, a minimum passenger capacity of 60 people per plane. With federal airport funding regulations currently in the process of being evaluated and modified, the specifics of Kotzebue's ability to charge PFCs are not available at this time.

As an example as a potential revenue source, in 2005 Kotzebue airport had 21,782 enplanements by large certified aircraft. If Kotzebue collected $4.50 per passenger for each of these, approximately $98,000 would have been collected. With these additional funds, the airport's operating loss would still have been about $1 million in 2006 (Table 6-5). One constraint on this potential source may be the number of seats on aircraft flying into Kotzebue since most large aircraft on this route may be combination passenger/cargo jets, with a passenger capacity of less than 60 people per plane.

6.4.6 Operating Surpluses

In addition to paying operations and maintenance expenses, airport revenues may be used to finance "pay as you go" capital projects, and can be pledged to pay bondholders both principal and interest. However, many airports have no money left over after paying their operating expenses. Moreover, sources of operating revenues for small airports may be limited. In comparison to large airports, small airports receive much less revenue from activities associated with serving airlines and passengers such as landing fees (which usually are based on the weight of the aircraft), terminal area rental (for concessions and rental car companies), and parking fees. Small commercial and general aviation airports across the United States often require subsidies from local and state governments to fund operating expenses. In Alaska, all airports receive some type of federal and/or state grants.

At most commercial airports, the financial and operational relationship between an airport and the airlines it serves is defined in legally binding agreements that specify how the risks and responsibilities of airport operations are to be shared between the two parties, called "airport use agreements." The contracts generally specify the methods for calculating the rates airlines must pay for use of airport facilities and services, as well as identify the airlines' rights and privileges, such as the right to approve or disapprove any major proposed capital development project the airlines are required to finance.

The primary source of income for the existing Kotzebue airport is revenue from lease lots and tie-down fees. These revenues have not been able to keep up with the rising cost of fuel used to heat buildings, run equipment, and transport freight (see Table 6-5).

Table 6-5 – Kotzebue Airport Yearly Profit/Loss Statement, 2002-2006

Fiscal Year	Lease Lot and Tie-Down Revenue ($)	Revenue Growth (%)	M&O Expenses ($)	Expense Growth (%)	Profit/(Loss) ($)
2002	$ 81,761		$ 485,572		($ 403,811)
2003	$ 86,641	6%	$ 660,672	36%	($ 574,031)
2004	$ 90,828	5%	$ 854,173	29%	($ 763,345)
2005	$117,016	29%	$1,050,135	23%	($ 933,119)
2006	$111,479	-5%	$1,219,892	16%	($1,108,413)
Average annual growth		**9%**		**26%**	

6.4.7 Property Sales/Leases

Property sales or leases are another source of funds for investment. By selling property, airports can raise funds on a one-time basis. Alternatively, land can be leased to developers in order to generate an income stream that can be used pay debt service on bonds. Airport operators can determine the "highest and best use" by forecasting the market demand for property having commercial uses. The demand (land absorption and price) for residential, office, retail, and industrial (which includes warehouse and distribution) property is projected to determine revenue. The revenue available for funding capital projects is calculated by deducting the estimated cost to access and service the property.

The majority of revenues received by the airport (shown in Table 6-5) come from property leases and tie-down fees. Even with the recently proposed tripling of lease rates per square foot, however, the revenues associated with leasing would not allow the airport to operate at a profit.

To help ensure the highest and best use of the property, the airport operator can perform land use planning processes at multiple levels:

- Service plan—establishes the specific strategy for providing the access and utility improvements required for the implementation of the land use plan. Planned improvements (for example, major roadway(s) and utilities required to access and service the property for its highest and best use) can be developed by phase based on an analysis of areas that can be absorbed by the market over a reasonable amount of time and serviced with improvements that can be developed in reasonable cost increments.
- Financing plan—establishes the strategy for funding the infrastructure improvements required for land development. The plan identifies public and private funding methodologies available considering ownership of property, bond ordinances, and other factors. The financing plan quantifies and evaluates the costs of funds, including initial (start-up) costs, interest, guarantees, and flexibility to change funding methods.
- Marketing plan—establishes the price of property to be set to achieve the airport operators goals of quality of development, market share, and absorption rate. The target market of users, disadvantaged business enterprises, and developers should be identified in the plan. A promotion plan is developed using a mix of printed material, the Internet, presentations, mailings, and advertising to reach the target market.

If the airport moved from the current airport location, the land owned by DOT&PF could be sold or swapped to partially fund acquisition of new property, or DOT&PF could remain the land owner and generate revenues from leasing land. Given the cost estimates of the new airport, it is highly unlikely that leases would generate sufficient revenue to justify ownership and maintenance of two large parcels, one with an active airport and the other used for another purpose. However, it is likely that contamination of the current airport site could lead to high cleanup and disposal costs, with the potential of eliminating any potential revenues from the sale.

Section 6.3 of this report identifies near- and long-term uses for the vacated land should the airport be relocated. The vacant land would be unique in that it would be a large parcel of undeveloped land immediately adjacent to dense residential and commercial development.

6.4.8 Public/Private Partnerships

Airport operators have explored many ways of doing business that involve varying degrees of private-sector involvement in the management, capital investment decision making, financing, and pricing of airport facilities and services. Private involvement at airports nationwide includes airline involvement in capital decision making, contracting of services to private companies, master concessionaire agreements, and private terminal development. For example, AMR (American Airlines' parent company) developed, renovated, and financed Terminal 4 at Los Angeles International Airport with special facility bonds issued by AMR and backed by

their lease payments. In 2005, DOT&PF set a goal of increasing private investment at its airports by 2 percent (DOT&PF, 2007). While a discussion is provided below on public private partnerships, the options for Kotzebue are limited in this respect, because any potential private investor would expect a reasonable return on their investment. However, discussions could take place with Alaska Airlines and other carriers who operate out of the airport. Of note in a public/private partnership, the risk is shifted to the private sector along with the potential for revenue generation.

One "hybrid" alternative of airport privatization would be an expansion of the public/private partnership concept. The local government would hold title to the land on both the airside and landside, and basic infrastructure improvements on the airside including runways and taxiways would still be funded primarily through AIP grants. Private investment would be emphasized in developing revenue-generating landside facilities—a single private developer could be given the responsibility for the development and management of all terminal and ground transportation facilities. The developer would lease the land from the local government authority under a long-term agreement, hold title to the passenger and cargo terminal facilities, concessions and any other improvements it built on the land, and control development rights on the airport. The developer, or the contracted airport operator if the activity is separately contracted, would operate and maintain the airside under a separate agreement, taking into account any special mandates that accompanied the use of tax-exempt bonds, state funds and/or AIP grants.

Through this strategy that expands public/private partnership concepts currently in use (such as at Bob Hope Airport, which is administered by a private contractor), financial risks for new airport development would be shared between the public and private sectors. The public trust would be maintained via the government authority ownership of the airport land, maintenance of AIP grant and other agreements and terms of the public-private development agreement to be negotiated prior to the airport's financing and construction. Most importantly, this strategy has the potential to bring substantial new capital to a new and expanding airport that it otherwise could find difficult to obtain.

DOT&PF scores projects higher when the affected community or community members are interested in contributing to the project. One commodity frequently available in a local community is gravel. To the extent that it is available and depending on the ownership, contributing gravel may be an option for Kotzebue, especially when considering the amount of gravel needed for any of the build options. In other communities, the local government has donated the land. In this case, this may be an option, depending on the relocation area chosen.

6.4.9 Summary of Financing Options

Financing the proposed Kotzebue airport will require a financing strategy that draws on every possible avenue for financing ranging from federal to state grants, enactment of the passenger facility charges, selling or leasing current airport facilities, new leases at the new facilities, and shared facilities and services. Table 6-6 provides a summary of most of the potential funding sources available for financing a new Kotzebue Airport.

Table 6-6 – Summary Table of Potential Funding Sources for New Kotzebue Airport

Federal	State	Local	Private
FAA AIP	Outright Grants	Issue GO Bonds	Airport Privatization
Congressional Earmarks	Matching Funds	Airport Operating Surpluses	Private Development of Landside Facilities
Passenger Facility Charges	Issue GO Bonds	Operation Subsidies	Private Operation of Airside
	Operation Subsidies	Revenues from Property Sales or Leases	Contributions of Services or Materials
	Revenues from Property Sales or Leases	Contributions of Services or Materials	Individual, Corporate, or Foundation Grants, Contributions, and/or Operation Subsidies
	Contributions of Services or Materials		