NEVADA DEPARTMENT OF TRANSPORTATION

STUDY TO IDENTIFY

SUSTAINABLE FUNDING FOR THE NEVADA FUND FOR AVIATION

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TABLE OF CONTENTS

TABLE OF CONTENTS

Tables

1.0 STUDY PURPOSE

The Nevada Legislature authorized the Nevada Department of Transportation (NDOT) (Senate Bill No. 526, Section 24, June 6, 2005, copy included in **Appendix A**) to:

- Conduct a Study to identify sustaining funding sources for the Fund for Aviation (Fund), created by Nevada Revised Statute (NRS) 494.048
- Report NDOT's recommendations to the 74th Session of the Nevada Legislature
- Summarize the needs of rural airports, including, but not limited to, conditions of runways, lights for night operations, runway markings, available restrooms and telephones
- Form a Study Committee consisting of airport and aviation professionals, NDOT staff and Department of Taxation staff

This Report identifies the airports that are eligible for awards from the Fund, estimates the average annual need for funding, identifies taxes and fees that are most commonly imposed upon aviation activities, identifies and compares the taxes and fees used by eleven survey states to fund airport development projects, and discusses potential funding scenarios.

2.0 FUND ELIGIBILITY REQUIREMENTS

NRS 494.048 subsection 3. establishes the basic eligibility requirements for awards from the Fund. The awards are to be used to obtain matching money for federal programs and any other programs relating to airports or for the planning, establishment, development, construction, enlargement, improvement or maintenance of any airport, landing area or air navigation facility owned or controlled by the county, city or other local government. NRS 494.048 subsection 6. excludes airports, landing areas and air navigation facilities that are owned or controlled by the Reno-Tahoe Airport Authority and any county whose population is 400,000 or more.

Reno/Tahoe International Airport and Reno/Stead Airport are ineligible because they are owned and operated by the Reno-Tahoe Airport Authority. McCarran International Airport, North Las Vegas Airport, Henderson Executive Airport, Jean Sport Aviation Center, and Overton Perkins Field are ineligible

because they are owned and operated by Clark County, which has a population of more than 400,000.

Table 1 identifies the twenty-five airports that meet these eligibility requirements. These airports are referred to collectively throughout this report as the Eligible Airports. Of the Eligible Airports, Elko Regional Airport is the only airport with scheduled commercial airline service. All other Eligible Airports are general aviation or reliever airports.

Table 1
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Airports Eligible for Awards From the Fund

City	Airport	City	Airport
Alamo	Alamo Landing Field	Jackpot	Jackpot/Hayden Field
Austin	Austin	Lovelock	Derby Field
Battle Mountain	Battle Mountain	Mesquite	Mesquite
Beatty	Beatty	Minden	Minden-Tahoe
Boulder City	Boulder City Muni.	Overton	Echo Bay
Carson City	Carson	Owyhee	Owyhee
Elko	Elko Regional	Panaca	Lincoln County
Ely	Ely/Yelland Field	Silver Springs	Silver Springs
Eureka	Eureka	Tonopah	Tonopah
Fallon	Fallon Muni.	Wells	Wells Muni./Harriet Field
Gabbs	Gabbs	Winnemucca	Winnemucca
Goldfield	Goldfield	Yerington	Yerington
Hawthorne	Hawthorne Muni.		

3.0 NEEDS

The Study used several methodologies to estimate the needs of the Eligible Airports.

3.1 Survey of Eligible Airports

NDOT staff conducted a survey of the Eligible Airports to determine the primary types of needs and the estimated costs that would be incurred to address those needs. Table 2 summarizes the results of those interviews reported as average annual costs. The cost information in Table 2 is subject to

fluctuations associated with changes in construction and other costs. The estimated costs by airport are included in **Appendix B**.

Every Eligible Airport reported a need to repair or improve its runways, taxiways and/or aprons/ramps. These airfield pavement projects represent more than 78% of the reported needs. Runway markings would be included in these projects. The approximate cost of the runway markings is between $200,000 and $300,000 for the 24 general aviation airports. This assumes that the runways are marked after pavement repairs and improvements are made.

Elko Regional Airport has two paved (asphalt) runways; the longest is 7,214 feet long and the other is 2,871 feet long. According to the FAA's Airport Master Records for the remaining 24 Eligible Airports:

- 21 airports have at least one paved (asphalt) runway
- 1 airport (Boulder City) has three paved (asphalt) runways
- 1 airport (Minden-Tahoe) has two paved (asphalt) runways and one dirt runway
- 1 airport (Hawthorne) has one paved (asphalt) runway and two dirt runways
- 2 airports have only dirt runways (2 runways for each airport)
- 1 airport has only a single gravel runway
- 5 airports have two paved (asphalt) runways
- 2 airports have 2 runways, one paved (asphalt) and the other dirt
- 17 airports have paved (asphalt) runways that are longer than 5,000 feet; this length can accommodate many corporate jets
- the lengths of the paved (asphalt) runways range from 2,200 feet to 7,400 feet and averages 5,641 feet
- the lengths of the dirt runways range from 2,500 feet to 5,900 feet and averages 3,553 feet
- the single gravel runway is 3,150 feet long

Only six airports reported needs for airport lighting. These costs represent slightly more than 3% of the total reported needs.

None of the Eligible Airports specified a need for funds to provide or improve restrooms or telephone service. These costs are expected to be

relatively insignificant when compared to the costs of other improvements. The federal eligibility for the costs to install, improve, reconstruct, or repair utilities is limited. An innovative approach to improving restrooms and telephone service would involve NDOT allowing local governments to use the costs of such improvements as part of their portion of the non-federal share of federally funded projects. (See Section 3.2 below.)

Table 2

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Survey of Eligible Airports' Average Annual Development Costs

Category	Airports Reporting Need	Reported Need ($)	Percent Of Total Reported Need
Runways	18	7,675,593	40.4
Taxiways	13	5,896,020	31.0
Aprons/Ramps	14	1,315,155	6.9
Navigational Aids	13	1,183,020	6.2
Other Pavement	7	1,027,683	5.4
Drainage	6	770,247	4.1
Lighting	6	628,933	3.3
Fencing	8	428,667	2.3
Environmental	4	86,000	0.4
Total		19,011,318	100.0

3.2 Development Costs Reported in National Plan of Integrated Airport Systems

The Federal Aviation Administration (FAA) oversees the federal grant in aid program known as the Airport Improvement Program (AIP). The FAA also produces the National Plan of Integrated Airport Systems (NPIAS). The NPIAS identifies the airports that are eligible to receive AIP grants. The NPIAS estimates that the cost of AIP-eligible infrastructure development that will be needed over a five-year period (the current NPIAS is based on 2005 – 2009) to meet the needs of civil aviation.

Table 3 identifies the average annual NPIAS estimated development costs for the Eligible Airports. In most cases, the FAA funds 95% of the costs of AIP-eligible projects. The 5% balance, referred to commonly as the "non-federal share, is funded in most cases by the airport owner and the state aviation

agency. Table 3 also identifies the estimated federal and non-federal shares of the NPIAS projects.

Table 3

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Estimated Average Annual AIP Eligible Development Costs

Airport	Average Annual NPIAS Costs ($)	Estimated Federal Share ($)	Estimated Non-Federal Share ($)
Alamo Landing Field	206,000	195,700	10,300
Austin	339,600	322,620	16,980
Battle Mountain	2,025,600	1,924,320	101,280
Beatty	574,600	545,870	28,730
Boulder City Municipal	170,000	161,500	8,500
Carson	1,410,000	1,339,500	70,500
Elko Regional	3,072,420	2,918,799	153,621
Ely/Yelland Field	1,331,400	1,264,830	66,570
Eureka	405,120	384,864	20,256
Fallon Municipal	300,000	285,000	15,000
Gabbs	144,800	137,560	7,240
Goldfield	277,333	263,467	13,867
Hawthorne Municipal	226,000	214,700	11,300
Jackpot/Hayden Field	337,000	320,150	16,850
Derby Field	276,280	262,466	13,814
Mesquite	331,130	314,574	16,557
Minden-Tahoe	4,451,500	4,228,925	222,575
Echo Bay	0	0	0
Owyhee	737,000	700,150	36,850
Lincoln County	619,200	588,240	30,960
Silver Springs	1,152,000	1,094,400	57,600
Tonopah	940,000	893,000	47,000
Wells Municipal//Harriet Field	170,000	161,500	8,500
Winnemucca	1,050,000	997,500	52,500
Yerington	482,728	458,592	24,136
Totals	21,029,711	19,978,226	1,051,485

3.3 Current AIP Funding Methodology

The NPIAS does not constitute a commitment of AIP funding. Actual AIP funding levels are subject to authorization by Congress and are typically less than average NPIAS levels. AIP funding of projects at the Eligible Airports in Fiscal Year 2006 is projected to be approximately $9,883,463 and includes the following:

- $3,750,000 in entitlements for general aviation airports (most of the general aviation Eligible Airports are entitled to $150,000 of AIP funds)
- $5,383,463 in state apportionment grants to general aviation airports based on area and population
- Approximately $750,000 of primary entitlement and discretionary funding for Elko Regional Airport (assumes 25% of the average federal share of the annual development cost reported in the NPIAS).

Approximately $520,182 in matching funds is required to leverage approximately $9,883,463 in AIP funds to realize a total development cost of $10,403,645.

3.4 Equivalent Funding Demand

PB conducted a telephone survey of eleven state aviation agencies. A summary of that survey is included in **Appendix C**. The survey identified, by state, the sources of funding used for state aviation programs, the total average annual funding for state aviation programs, the average annual administrative, education, operating expenses and refunds, the average annual funding for airport projects, and the number of airports that are eligible for state funding. Each of the eleven survey states award state funds to public-use airports, even those public-use airports that are not included in the NPIAS and, therefore, ineligible for AIP funds.

Table 4 on the following page identifies the average annual funding for airport projects, the number of public-use airports, and the average funding per public-use airport for each of the survey states. Table 4 also calculates what the equivalent demand on the Fund would be if Nevada funded airport projects at each of the 25 Eligible Airports at the same average rates of the survey states. More detailed information on funding by the survey states can be found in Sections 6.9 and 6.10 of this Report.

Table 4

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Calculated Equivalent Funding ($000)

Survey State	Annual Airport Funding	Number Public-Use Airports	Average Funding Per NPIAS Airport	Equivalent Nevada Funding
Arizona	17,700	81	219	5,475
California	4,600	263	17	425
Idaho	1,300	120	11	275
Oregon	1,800	98	18	450
Utah	2,300	47	49	1,225
Alabama	1,400	98	14	350
Colorado	4,300	77	56	1,400
North Dakota	1,500	90	17	425
Oklahoma	2,400	148	16	400
Tennessee	17,000	83	205	5,125
Wyoming	2,200	41	54	1,350
Totals	56,500	1,146	49	1,225
Adjusted Totals (w/o AZ, ID, AL, TN)	19,100	764	25	625

3.5 Ineligible Airports

This Report focuses on the Eligible Airports. Feedback from the owners, operators, and users of public-use airports that are ineligible for awards from the Fund (either because they are not included in the NPIAS or because they are privately owned) indicates that at least some of the ineligible airports lack the airport revenue and external funding required in order to make repairs and improvements. Further data collection and analysis would be needed to fully describe the types and estimated costs of repairs and improvements needed at each ineligible airport. Five of the eleven survey states use state funds to support airport development at privately owned airports that are operated for public use.

3.6 Conclusion

Except as noted below, the Current AIP Funding methodology offers the most realistic forecast of the average annual demand on the Fund to match

existing federal funds. This methodology predicts an average annual demand on the Fund ranging from $260,091 to $468,164 depending upon the percentage of the non-federal share to be paid from the Fund.

The development costs reported in the NPIAS include only those costs that are eligible for AIP funding. Airport development projects routinely include some element of services or materials that are ineligible for AIP funding, but are still necessary to complete the project. A realistic estimate of such ineligible but necessary costs would be $104,036, which represents 1% of the $10,403,645 total estimated development costs. This brings the range of the average annual demand on the Fund up to between $312,109 and $561,796. The higher end of the range is within 10% of the adjusted average equivalent funding of $625,000 reported in Table 4.

Actual cash flow in any fiscal year often varies from the amounts awarded in AIP or state grants. Therefore, the cash flow demand upon the Fund may actually be more than or less than the amount of grants awarded in any fiscal year. The potential needs identified above represent average annual needs in a normalized state. In the near term, the actual annual demand will be somewhat lower. Some airports will not prepared to initiate projects in the first year because they do not have sufficient funds for their local match or they need to complete planning or environmental permitting prior to starting certain projects. With this in mind, consideration should be given to implementing new taxes and fees, if any, in increments so that tax collections are commensurate with actual demand. The annual needs should normalize somewhere in three to five years. Additional analysis of the actual ability of the airports to meet the eligibility requirements for awards from the Fund would be needed to determine a more accurate annual demand on the Fund in the first five years.

Among other things, the additional analysis should assess each airport's ability to provide its share of the local match needed to secure federal funds and should determine the extent to which each airport meets threshold requirements for federal funding in terms of the status of its airport master plan, airport layout plan and capital improvement plan. Given the likelihood that a sustaining funding source would involve new or increased taxes and fees, it is important to avoid building the Fund to levels that are inconsistent with a realistic demand on the Fund. In addition, some governments may benefit from the receipt of advice on developing multi-year budget forecasts for airport improvements, applying for federal funding, innovative ways to reduce operating costs. Partnering with NAMA could be a productive, cost-effective approach to this information sharing.

4.0 FEDERAL FUNDING

As noted earlier, the FAA administers the AIP. The AIP is funded by the Airport and Airways Trust Fund (AATF). Detailed information on the AATF and AIP is included in **Appendix D**.

The taxes that fund the AATF expire at the end of Federal Fiscal Year 2007. New or revised taxes require the authorization of Congress. The current congressional authorization of the AIP also expires at the end of Fiscal Year 2007. A congressional conference Committee is currently reviewing Senate and House versions of the U.S. Department of Transportation (USDOT) spending bill, which includes funding for the AIP.

Airports must be identified in the FAA's NPIAS to be eligible for AIP funding. (http://www.faa.gov/arp/planning/npias/) In Nevada, four commercial service airports, i.e. airports with scheduled commercial airline service, and twenty-eight general aviation airports are currently included in the NPIAS. The four commercial service airports are McCarran International (Las Vegas), North Las Vegas Airport, Reno/Tahoe International Airport, and Elko Regional Airport. Three commercial service airports (McCarran, North Las Vegas and Reno/Tahoe) and four general aviation airports (Henderson Executive, Reno/Stead, Jean Sport Aviation Center and Overton Perkins Field) are ineligible for awards from the Fund pursuant to NRS 494.048 Subsection 6. The 25 airports that are in the NPIAS and eligible for awards from the Fund are listed in Table 1 of Section 2 of this Report.

The current NPIAS covers the period 2005 through 2009. The estimated development costs for Nevada airports identified in the NPIAS are included in **Appendix E**. Eight airports (Battle Mountain, Boulder City Municipal, Carson, Ely/Yelland Field, Henderson Executive, Minden-Tahoe, Owyhee, Lincoln County, Reno/Stead, Silver Springs, and Winnemucca Municipal) account for approximately 76% of the estimated development costs of the general aviation airports eligible for awards from the Fund.

As reported in Section 3.3 of this Report, approximately $520,182 in matching funds is required to leverage approximately $9,883,463 in FY2006 AIP funds to realize a total development cost of $10,403,645. If AIP-ineligible expenses are included, approximately $624,218 in matching funds is required to leverage approximately $9,883,463 in FY2006 AIP funds to realize a total development cost of $10,507,681.

5.0 STATE TAXES AND FEES IMPOSED UPON AVIATION ACTIVITIES

This Section focuses upon the primary types of taxes and fees imposed by states upon aviation activities. In some cases, the tax revenue is allocated to non-aviation purposes including, but not limited to city/county relief, public safety, schools, and other forms of transportation. A discussion on the revenue sources used by the survey states to fund development projects at airports is discussed in Section 6.

5.1 Sales and Excise Taxes on Aviation Fuel

Tables 5 through 8 provide information on state sales and excise taxes imposed upon aviation jet fuel and aviation gasoline. The tax rates/amounts do not include optional or other taxes tax that may be imposed by counties, cities, or towns.

Each county in Nevada is permitted to impose an additional $0.01 per gallon excise tax on aviation jet fuel and $0.08 per gallon excise tax on aviation gasoline. Clark County is further authorized to impose an additional $0.02 per gallon excise tax on aviation jet fuel. According to information provided by the Nevada Department of Taxation:

- Clark County is collecting both the optional $0.01 and the $0.02 excise taxes on aviation jet fuel, but not the optional $0.08 excise tax on aviation gasoline.
- Douglas, Elko and Humboldt counties are collecting both the optional $0.01 excise tax on aviation jet fuel and the optional $0.08 optional excise tax on aviation gasoline.
- Carson City, Lyon, Nye, and Washoe counties are collecting the optional $0.01 excise tax on aviation jet fuel.

In summary, nine of the seventeen counties are collecting the optional $0.01 excise tax on aviation jet fuel and only three of the seventeen counties are collecting the optional $0.08 excise tax on aviation gasoline.

Table 5

Study to Identify Sustaining Funding for Nevada Fund for Aviation

State Sales Tax on Aviation Jet Fuel

Number of States That Impose Sales Tax	20	
Highest Sales Tax Rate	California	7.25%
Lowest Sales Tax Rate	Colorado	3.00%
Average Sales Tax Rate	5.19%	
Nevada Sales Tax Rate	***0.00%***	
Arizona Sales Tax Rate	0.00%	
California Sales Tax Rate	7.25%	
Idaho Sales Tax Rate	0.00%	
Oregon Sales Tax Rate	0.00%	
Utah Sales Tax Rate	0.00%	

Table 6

Study to Identify Sustaining Funding for Nevada Fund for Aviation

State Excise Tax on Aviation Jet Fuel

Number of States That Impose Excise Tax	33	
Highest Excise Tax Rate Per Gallon	Utah	$0.090
Lowest Excise Tax Rate Per Gallon	Oklahoma	$0.001
Average Excise Tax Rate Per Gallon	$0.037/gallon	
Nevada Excise Tax Rate	***$0.010***	
Arizona Excise Tax Rate Per Gallon	$0.031	
California Excise Tax Rate Per Gallon	$0.020	
Idaho Excise Tax Rate Per Gallon	$0.045	
Oregon Excise Tax Rate Per Gallon	$0.010	
Utah Excise Tax Rate Per Gallon	$0.090	

Table 7

Study to Identify Sustaining Funding for Nevada Fund for Aviation

State Sales Tax on Aviation Gasoline

Number of States That Impose Sales Tax	15	
Highest Sales Tax Rate	Washington	6.50%
Lowest Sales Tax Rate	Georgia, Hawaii, Louisiana	4.00%
Average Sales Tax Rate	5.10%	
Nevada Sales Tax Rate	***0.00%***	
Arizona Sales Tax Rate	0.00%	
California Sales Tax Rate	0.00%	
Idaho Sales Tax Rate	0.00%	
Oregon Sales Tax Rate	0.00%	
Utah Sales Tax Rate	0.00%	

Table 8

Study to Identify Sustaining Funding for Nevada Fund for Aviation

State Excise Tax on Aviation Gasoline

Number of States That Impose Excise Tax	41	
Highest Excise Tax Rate Per Gallon	Vermont	$0.290
Lowest Excise Tax Rate Per Gallon	Oklahoma	$0.001
Average Excise Tax Rate Per Gallon	$0.082	
Nevada Excise Tax Rate Per Gallon	***$0.020***	
Arizona Excise Tax Rate Per Gallon	$0.050	
California Excise Tax Rate Per Gallon	$0.180	
Idaho Excise Tax Rate Per Gallon	$0.055	
Oregon Excise Tax Rate Per Gallon	$0.090	
Utah Excise Tax Rate Per Gallon	$0.090	

Airlines are becoming more active in their opposition to fuel taxes based upon percentages. Since the cost of aviation jet fuel has reportedly increased nearly 400% over the past five years, their fuel tax related expenses have skyrocketed. Given the precarious financial position many airlines find themselves in, there is a reasonable chance that the airlines will be able to win some kind of relief, whether in the form of a rebate or changing the tax structure from a percentage to a fixed amount.

5.2 Property Tax

Twenty-one states impose property taxes on aircraft. The bases and rates vary significantly. Nevada currently charges $3.1122 per $100 of assessed value**.** These taxes are collected by the counties in Nevada. The success in collection of these taxes is difficult to evaluate. FAA aircraft registration data most often links the location of an aircraft with the location of its owner. If a company in Delaware leases an aircraft to someone who bases that aircraft in Nevada, the FAA aircraft registration data will most likely report that aircraft as being in Delaware and not Nevada.

5.3 Aircraft Registration Fees

Twenty-five states impose property taxes on aircraft. The bases and rates vary significantly. Nevada does not impose an aircraft registration fee. For reasons similar to that discussed above, the success in collection of these registration fees can be difficult to evaluate and costly to implement.

5.4 Other Taxes and Fees

With some minor exceptions, the following taxes and fees represent relatively minor sources of revenue:

- The state of Alabama acquired a number of military fields that were being closed as a part of the Base Realignment and Closure (BRAC) program. The state runs these airports and the average annual revenue of $350,000 represents approximately 16% of Alabama's funding sources.
- Fuel flowage fees contribute an average of $166,000 (5%) to Oregon's funding sources.
- Idaho and Oregon impose a pilot registration fee, which produces an average of $10,000 and $40,000 annually respectively.
- North Dakota licenses aircraft dealers and aerial applicators. These fees produce a combined average of less than $12,000 annually.

6.0 SURVEY OF STATE FUNDING SOURCES AND PROGRAMS FOR AIRPORT DEVELOPMENT PROJECTS

This Section focuses only on funding sources that are: a) imposed by a state agency; and, b) used to fund airport development projects and state system projects.

6.1 Survey

NDOT and its consultant team reviewed a previous survey that had been prepared by NASAO for its membership. The NASAO survey included information on funding sources and programs by state based on Fiscal Years 2002 and 2003. (NASAO is in the process of updating their survey.) Five neighboring states and six other states were selected and are identified below. The non-neighboring states were selected after consideration of their funding programs, the manner in which their programs are administered, and the similarities of their airport systems to the Nevada airport system.

Neighboring States	**Other States**
• Arizona	• Alabama
• California	• Colorado
• Idaho	• North Dakota
• Oregon	• Oklahoma
• Utah	• Tennessee
	• Wyoming

PBQD contacted appropriate staff within the eleven state agencies and conducted one or more phone interviews with each state. The results of those interviews are discussed below and are summarized in Appendix C.

North Dakota, Oklahoma and Oregon are independent state aviation agencies. The remaining eight survey state aviation agencies are a part of their respective state department of transportation.

6.2 *Taxes on Aviation Fuels*

Table 9 summarizes survey information pertaining to taxes on aviation fuels. These taxes represented approximately 51% of the total revenue dedicated to airports for the survey states.

Strictly speaking, taxes on aviation fuels in Tennessee are not dedicated to their airport development fund. Their fund is supported 100% by annual authorizations during the budget process. However, the amount of aviation fuel tax revenue essentially supports the annual authorization. If for discussion

purposes you assume that Tennessee's source of funds are fuel taxes, then fuel taxes represent 70% of the funding sources for the survey states.

Colorado, Utah and Wyoming refund a portion of the fuel tax revenues to the airports where the tax was generated. Airports can use these funds for almost any legitimate operating expense or capital cost.

Table 9

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Survey Results: Taxes on Aviation Fuels

State	Jet Fuel Sales Tax	Jet Fuel Excise Tax	Aviation Gasoline Sales Tax	Aviation Gasoline Excise Tax	Average Annual Revenue ($000)	Percentage of State Funding Sources
AZ		$0.031		$0.050	500	3%
CA	7.250%	$0.020		$0.180	7,600	100.0%
ID		$0.045		$0.055	1,600	97%
OR		$0.010		$0.090	2,400	3%
UT		$0.090		$0.090	4,305	53%
NV		**$0.010**	**NA ***	**$0.020**	**NA ***	**NA ***
AL		$0.009		$0.027	600	28%
CO	3.00%	$0.040		$0.060	17,200	100%
ND		$0.080		$0.080	500	23%
OK		$0.001		$0.001	35	1%
TN					0	0%
WY		$0.050		$0.050	6,000	86%

* Currently, the only funding sources are transfers authorized by the Legislature.

6.3 Aircraft Sales Taxes

Only North Dakota and Oklahoma use taxes on the sales of aircraft as a funding source. North Dakota collects approximately $365,000 annually, which represents 16% of their total funding sources. Oklahoma on the other hand collects approximately $3,000,000 annually, which represents nearly 88% of their total funding sources.

6.4 Aircraft Property Taxes

Only Arizona uses aircraft property taxes as a funding source. Their average annual collection of $12,000,000 represents 65% of their total funding sources.

6.5 Aircraft Registration Fees

Table 10 summarizes survey state revenues associated with aircraft registration fees. With the exception of Arizona, Oklahoma and Oregon, these fees represent a relatively minor source of revenue to the survey states that impose these fees. In addition, several of the states suggested that collection of these fees required a significant effort and suggested that the net value of these fees after considering the costs of administration and collection should be considered.

Oklahoma has a provision whereby registration fees generated by aircraft with values in excess of $5,000,000 can be earmarked for the airport at which the aircraft is based.

Table 10

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Survey Results: Aircraft Registration Fees

State	Average Annual Revenue ($000)	Percentage of State Funding Sources
Arizona	6,000	33%
Idaho	40	2%
North Dakota	60	3%
Oklahoma	350	10%
Oregon	268	8%
Utah	200	2%

6.6 Authorizations Managed by Departments of Transportation

Alabama receives an average of $1,200,000 annually from the Alabama DOT. This represents 56% of their funding sources. North Dakota receives an

average of $275,000 annually from the North Dakota DOT. This represents 12% of their funding sources.

6.7 Other Sources

The following sources of funds represent small fractions of the overall funding for the survey states when viewed collectively. However, in some cases, these sources can be significant to individual states.

- **Transfers from taxes on mining operations.** The state of Wyoming receives an average of $1,000,000 from tax revenue associated with mining operations. This transfer recognizes the role the state airport system plays in supporting that industry. These funds represent 14% of Wyoming's funding sources.

- **Surplus Military Fields.** The state of Alabama acquired a number of military fields that were being closed as a part of the Base Realignment and Closure (BRAC) program. The state runs these airports and the average annual revenue of $350,000 represents approximately 16% of Alabama's funding sources.

- **Fuel flowage fees.** These fees contribute an average of $166,000 (5%) to Oregon's funding sources.

- **Taxes imposed on automotive fuels.** These tax revenues contribute an average of $36,000(1%) to Oklahoma's funding sources and $120,000 (3%) to Oregon's funding sources.

- **Other miscellaneous sources.** Idaho and Oregon impose a pilot registration fee, which produces an average of $10,000 and $40,000 annually respectively. North Dakota licenses aircraft dealers and aerial applicators. These fees produce a combined average of less than $12,000 annually. One state is considering using state lottery funds to support their state airport fund. Another is considering the transfer of a portion of an existing business tax to airports where the businesses depend upon the local airports for their existence.

6.8 State Funding Eligibility

Every survey state considered NPIAS airports and other publicly owned airports that are not in the NPIAS to be eligible for state funding.

Colorado, North Dakota, Tennessee, Utah and Wyoming consider privately owned airports that are operated for public use eligible for state funding.

California and Oregon offer every state funding eligible airport a grant of $10,000 with no local match required.

With few exceptions, the survey states required some amount of local/airport participation in the funding of airport development projects that is not reimbursed by federal AIP grants. The local match was generally a fixed ratio with the state share ranging from 50% to 90%. Idaho adjusts its requirement for local match based on the population of the host community. Low population communities in Idaho receive higher percentages of state funds.

6.9 Adjustments for Administration, Education and Operations

Certain survey states use their state aviation funds to support administrative, educational and operating expenses. Also, as noted above, Colorado, Utah and Wyoming refund a portion of the fuel tax revenues to the airports where the tax was generated.

Table 11 on the following page adjusts the total average annual state aviation funding revenues by deleting funds used for administration, education and operations plus refunds to the airports. The figures in the far right column of Table 12 then represent the amount of state funding dedicated to airport projects and state system projects. State system projects can involve projects of a similar nature conducted at more than one airport, state system plans, and statewide navigational aid projects. The figures in Table 11 are approximate and represent information collected during the survey. Actual funding by each of the survey states is subject to change.

6.10 Average Spending

Table 12 identifies the number of NPIAS airports, public use airports (including the NPIAS airports), and based aircraft in each survey state. The source of this data was the NPIAS and the FAA Form 5010 Airport Master Record database.

Table 11

Study to Identify Sustaining Funding for Nevada Fund for Aviation

State Funding Dedicated to Airport Projects and State System Projects

State	Total Average Annual Funds ($000)	Administration, Education, Operations ($000)	Fuel Tax Refunds To Airports ($000)	Net Funding Available for Airport and State System Projects ($000)
Neighboring States				
Arizona	18,500	1,800	0	17,700
California	7,600	3,000	0	4,600
Idaho	1,650	400	0	1,250
Oregon	3,500	1,700	0	1,800
Utah	9,625	1,000	6,375	2,250
Other States				
Alabama	2,150	700	0	1,450
Colorado	17,200	860	12,060	4,280
North Dakota	2,225	730	0	1,495
Oklahoma	3,421	1,000	0	2,421
Tennessee	17,000	0	0	17,000
Wyoming	7,000	0	4,800	2,200

Table 12

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Airports and Based Aircraft

State	NPIAS Airports	Public Use Airports	Based Aircraft
Neighboring States			
Arizona	58	81	7,236
California	193	263	29,177
Idaho	37	120	2,525
Oregon	57	98	4,351
Utah	35	47	2,005

Table 12
Study to Identify Sustaining Funding for Nevada Fund for Aviation
State Funding Dedicated to Airport Projects and State System Projects
(continued)

Other States			
Alabama	73	98	3,041
Colorado	49	77	5,116
North Dakota	52	90	1,235
Oklahoma	102	148	3,485
Tennessee	70	83	3,303
Wyoming	33	41	1,002

Table 13 on the following page identifies the average spending per NPIAS airport, per public use airport and per based aircraft for each of the survey states.

Table 13
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Average State Funding

State	NPIAS Airports ($000)	Public Use Airports ($000)	Based Aircraft
Neighboring States			
Arizona	305	219	2,446
California	24	17	157
Idaho	34	10	495
Oregon	32	18	414
Utah	64	48	1,122
Averages	73	45	609

Table 13
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Average State Funding
(continued)

Other States			
Alabama	20	15	477
Colorado	87	56	837
North Dakota	29	17	1,211
Oklahoma	24	16	695
Tennessee	243	205	5,147
Wyoming	67	54	2,196
Averages	76	54	1,679
All Survey States			
Averages	74	49	903

Nevada has 32 NPIAS airports, 52 public use airports and 2,684 based aircraft. Table 14 identifies what Nevada's airport/system project spending would be if Nevada spent the same average annual amounts that the other survey states do. For example, multiplying the number of Nevada NPIAS airports (32) by the average spending per NPIAS airport in Idaho ($34,000) indicates that Nevada would need to spend approximately $1,088,000 annually to have its state funding be equivalent to that of Idaho.

Table 14
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Calculated Equivalent Funding Levels

State	NPIAS Airports ($000)	Public Use Airports ($000)	Based Aircraft
Neighboring States			
Arizona	9,760	11,388	6,565
California	768	884	421
Idaho	1,088	520	1,329
Oregon	1,024	936	1,111
Utah	2,048	2,496	3,011
Averages	2,336	2,340	1,635

Table 14
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Calculated Equivalent Funding Levels
(continued)

Other States			
Alabama	640	780	1,280
Colorado	2,784	2,912	2,247
North Dakota	928	884	3,250
Oklahoma	768	832	1,865
Tennessee	7,776	10,660	13,815
Wyoming	2,144	2,808	5,894
Averages	2,432	2,808	4,506
All Survey States			
Averages	2,368	2,548	2,423

Table 15 illustrates the revised averages if the highs and lows in each category are removed from the calculations.

Table 15
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Adjusted Calculated Equivalent Funding Levels

State	NPIAS Airports ($000)	Public Use Airports ($000)	Based Aircraft ($)
Neighboring States			
Idaho	1,088	520	1,329
Oregon	1,024	936	1,111
Utah	2,048	2,496	3,011
Averages	1,314	1,040	1,601

Table 15
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Adjusted Calculated Equivalent Funding Levels
(continued)

Other States			
Colorado	2,784	2,912	2,247
North Dakota	928	884	3,250
Oklahoma	768	832	1,865
Wyoming	2,144	2,808	5,894
Averages	1,410	1,519	2,574
All Survey States			
Averages	1,376	1,314	2,136

7.0 FUNDING SOURCES

PB conducted a telephone survey of eleven state aviation agencies. A summary of that survey is included in **Appendix C**. The survey indicates that state aviation agency funding of AIP-eligible projects ranged between 50% and 90% of the non-federal share. Table 16 on the following page estimates the average annual ranges in demand on the Fund based upon the three "needs" scenarios.

From the beginning of this Study, the Study Committee has sought to identify sufficient, sustainable revenue sources for the Fund that would leverage available federal AIP funds and make such other investments as needed to meet the demand for facilities at public use airports while maintaining Nevada's reputation for being a tax-friendly state. Sufficiency, sustainability, and the relationship of the new/increased taxes to neighboring states are the key criteria for evaluating the funding sources.

The following discussion assumes that:

- There will be no reallocation of aviation related tax revenue from its current non-aviation purposes back to aviation. To the degree the demand for aviation related tax revenue for non-aviation uses

subsides in the future, if at all, then the reallocation of that revenue could be considered a viable source of revenue for the Fund.

- For discussion purposes, the authorized annual demand on the Fund will be approximately $600,000 (rounded up from $561,796 in Section 3.6.)

- Except in Section 7.13, the entire annual contribution to the Fund will come from just one of the following taxes and fees.

Table 16

Study to Identify Sustaining Funding for Nevada Fund for Aviation

Potential State Shares of Non-Federal Funds

Basis of Cost Estimate	NDOT Survey	NPIAS	Current AIP Funding
Total Costs	19,011,318	21,029,711	10,507,863
Federal Share	18,060,752	19,978,226	9,883,463
Non-Federal Share	950,566	1,051,485	624,218
State Share at:			
50% Non-Federal Share	475,283	525,743	312,109
60% Non-Federal Share	570,340	630,891	374,531
70% Non-Federal Share	665,396	736,039	436,953
80% Non-Federal Share	760,453	841,188	499,375
90% Non-Federal Share	855,509	946,337	561,797

7.1 Sales Tax on Aviation Jet Fuel Sold/Purchased Outside Clark and Washoe Counties

- **Sufficiency.** Approximately 4,740,000 gallons of aviation jet fuel are sold per year in counties other than Clark County and Washoe County. The fixed base operator at Carson Airport posted a selling price (http://www.airnav.com/airport/KCXP/EL_AERO) of $3.92 per gallon on August 12, 2006. Using this selling price as an average, to generate $600,000 in new tax revenue, the new sales tax would have to be approximately 3.23%, which would increase the net cost to the consumer by approximately $0.127 per gallon.

- **Sustainability.** A tax increase of this magnitude, when considered in light of the significant increase in the base price of aviation jet fuel over the past year, could result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each.

- **Relationship to Neighboring States.** Only California has a sales tax on aviation jet fuel, which is 7.25%. Airlines are exempt from this tax.

7.2 Sales Tax on Aviation Jet Fuel Sold/Purchased Statewide

- **Sufficiency.** Approximately 474,000,000 gallons of aviation jet fuel are sold per year in Nevada. Most of this fuel is sold to the airlines. Using an estimated weighted average selling price of $3.00 per gallon, to generate $600,000 in new tax revenue, the new sales tax would have to be approximately 0.04%, which would increase the net cost to the consumer by approximately $0.0012 per gallon.

- **Sustainability.** The airlines have been very active in their opposition to taxes based upon a percentage of the sales price. Percentage based taxes, in concert with the significant increases in the base price of aviation jet fuel over the past year, can represent a severe burden on financially struggling airlines. .

- **Relationship to Neighboring States.** Only California has a sales tax on aviation jet fuel, which is 7.25%. Airlines are exempt from this tax.

7.3 Sales Tax on Aviation Gasoline Sold/Purchased Outside Clark and Washoe Counties

- **Sufficiency.** Approximately 986,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. The fixed base operator at Carson Airport posted a selling price of $4.30 per gallon on August 12, 2006. Using this selling price as an average, to generate $600,000 in new tax revenue, the new sales tax would have to be approximately 14.15%, which would increase the net cost to the consumer by approximately $0.608 per gallon.

- **Sustainability.** Sales of aviation gasoline in Nevada have been trending downward. A tax increase of this magnitude, when considered in light of the significant increase in the base price of

aviation gasoline over the past year, would result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each. Therefore, a sales tax of this size on aviation gasoline sold outside of Clark County and Washoe County would not produce sustainable funding.

- **Relationship to Neighboring States.** None of the neighboring states impose a sales tax on aviation gasoline.

7.4 Sales Tax on Aviation Gasoline Sold/Purchased Statewide

- **Sufficiency.** Approximately 2,900,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. Sales of aviation gasoline in Nevada have been trending downward. Using an estimated selling price of $4.30 per gallon, to generate $600,000 in new tax revenue, the new sales tax would have to be approximately 4.81%, which would increase the net cost to the consumer by approximately $0.207 per gallon.

- **Sustainability.** Sales of aviation gasoline in Nevada have been trending downward. A tax increase of this magnitude, when considered in light of the significant increase in the base price of aviation gasoline over the past year, would result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each. Therefore, a sales tax of this size on aviation gasoline sold outside of Clark County and Washoe County would not produce sustainable funding.

- **Relationship to Neighboring States**. None of the neighboring states impose a sales tax on aviation gasoline.

7.5 Excise Tax on Aviation Jet Fuel Sold/Purchased Outside Clark and Washoe Counties

- **Sufficiency.** Approximately 4,740,000 gallons of aviation jet fuel are sold per year in counties other than Clark County and Washoe County. To generate $600,000 in new tax revenue, the new excise tax would have to be nearly $0.13 per gallon.

- **Sustainability.** A tax increase of this magnitude, when considered in light of the significant increase in the base price of aviation jet fuel over the past year, could result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each.

- **Relationship to Neighboring States.** Nevada imposes a $0.01 per gallon excise tax on aviation jet fuel. An increase of $0.13 per gallon would put Nevada significantly higher than each of the five neighboring states, which impose a per gallon excise tax on aviation jet fuel as shown below:

  - Arizona - $0.031
  - California - $0.020
  - Idaho - $0.045
  - Oregon - $0.010
  - Utah - $0.090 (Utah refunds nearly 67% of the fuel tax revenue to airports.)

7.6 Excise Tax on Aviation Jet Fuel Sold/Purchased Statewide

- **Sufficiency.** Approximately 474,000,000 gallons of aviation jet fuel are sold per year in Nevada. Most of this fuel is sold to the airlines. To generate $600,000 in new tax revenue, the new excise tax would have to be nearly $0.0013 per gallon.

- **Sustainability.** Sales of aviation jet fuel have been gradually increasing and that trend is expected to continue.

- **Relationship to Neighboring States.** An increase of $0.0013 per gallon would have essentially no effect on the relationship of Nevada's excise tax on aviation jet fuel to that of the neighboring states.

7.7 Excise Tax on Aviation Gasoline Sold/Purchased Outside Clark and Washoe Counties

- **Sufficiency.** Approximately 986,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County

and Washoe County. To generate $600,000 in new tax revenue, the new excise tax would have to be nearly $0.609 per gallon.

- **Sustainability.** Sales of aviation gasoline in Nevada have been trending downward. A tax increase of this magnitude, when considered in light of the significant increase in the base price of aviation gasoline over the past year, would result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each. Therefore, a sales tax of this size on aviation gasoline sold outside of Clark County and Washoe County would not produce sustainable funding.

- **Relationship to Neighboring States.** Nevada imposes a $0.020 per gallon excise tax on aviation gasoline. An increase of $0.609 per gallon would put Nevada significantly higher than each of the five neighboring states, which impose a per gallon excise tax on aviation jet fuel as shown below:

  - Arizona - $0.05
  - California - $0.180
  - Idaho - $0.055
  - Oregon - $0.090
  - Utah - $0.090

7.8 Excise Tax on Aviation Gasoline Sold/Purchased Statewide

- **Sufficiency.** Approximately 2,900,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. To generate $600,000 in new tax revenue, the new excise tax would have to be nearly $0.207 per gallon.

- **Sustainability.** Sales of aviation gasoline in Nevada have been trending downward. A tax increase of this magnitude, when considered in light of the significant increase in the base price of aviation gasoline over the past year, would result in a reduction of total fuel sales related to reduced flying, purchasing fuel in one of the neighboring states at lower net costs, or a combination of each. Therefore, a sales tax of this size on aviation gasoline sold outside of

Clark County and Washoe County would not produce sustainable funding.

- **Relationship to Neighboring States**. Nevada imposes a $0.020 per gallon excise tax on aviation gasoline. An increase of $0.207 per gallon would put Nevada significantly higher than each of the five neighboring states.

7.9 Aircraft Property Tax

- **Sufficiency.** Based on the current rate of $3.1122 per $100 of assessed value, Nevada counties are collecting approximately $4,300,000 annually in aircraft property taxes. To generate $600,000 in new tax revenue, an increase in the property tax of $0.4342 per $100 would be required.

- **Sustainability.** A tax increase of this magnitude could result in aircraft owners to relocate their aircraft at airports in neighboring states. To the degree this occurs, the counties could lose some portion of their base property tax revenue. The sustainability of property taxes as the primary source of funding for the Fund is highly suspect.

- **Relationship to Neighboring States**.

7.10 Aircraft Registration Fees

Nevada does not impose an aircraft registration fee at this time. The following states have aircraft registration programs and their average registration fee per based aircraft is reported below:

- Arizona: $829
- Idaho: $16
- North Dakota: $296
- Oklahoma: $860
- Oregon: $62

According to the NPIAS, there are 2,684 aircraft based in Nevada. An average registration fee of $50.00 per based aircraft could generate $132,200 in

annual revenue. As noted above, there would likely be some expense incurred in administering this new program. For discussion purposes only, and based primarily upon the PBQD's project manager's experience as the former state aviation director in New England, such a program could be administered by one full time person with the right software and computer program. Initial startup costs could be in the range of $5,000 to $10,000 for the computer, software and initial paper stock. Ongoing wages and benefits plus other expenses associated with mailings, etc. could average an additional $35,000 to $40,000 annually. Increasing the average aircraft an additional $0.75 would recover the initial startup costs in five years. Increasing the average registration fee an additional $15.00 would offset the estimated expenses for administering the program. These two increases, if implemented, would increase the average aircraft registration fee to $70.00 per aircraft. The Study Committee supports the implementation of a reasonable aircraft registration fee program within the larger context of implementing a reasonable tax/fee package that will produce sustaining funds for the Fund for Aviation without creating an inequitable burden on a particular consumer group. A sliding scale fee system should be considered to distribute the overall burden equitably across various aircraft types.

7.11 Reallocation of Existing Taxes

It is not uncommon for aviation related tax revenue to be used for non-aviation purposes. Members of the Study Committee asked that consideration be given to redirecting revenue to the Fund that is generated from aviation activities but is currently allocated to non-aviation purposes. The following discussion focuses on the current taxes on aviation activities and the disposition of those revenues.

To the extent that the non-aviation demand for aviation related tax revenue continues to exist and be justifiable, the reallocation of that revenue, or some portion thereof, to aviation uses would either exacerbate existing revenue shortfalls or create new revenue shortfalls in some other sector of the government. This Study assumes the non-aviation demand continues to exist and continues to be justifiable on the basis the enabling legislation has not been amended to reflect a reduction in or elimination of the need for that aviation related revenue. However, to the degree the demand for aviation related tax revenue for non-aviation uses subsides in the future, if at all, then the reallocation of that revenue could be considered a viable source of revenue for the Fund.

- **Excise Tax on Aviation Jet Fuel.** With one exception, the excise tax on aviation jet fuel is intended to be used for aviation purposes. Pursuant to NRS 365.545, proceeds of taxes on fuel for jet or turbine-

powered aircraft must be deposited in the Account for Taxes on Fuel for Jet or Turbine-Powered Aircraft in the State General Fund and must be allocated to the: (a) governmental entity which operates the airport at which the tax was collected, if the airport is operated by a governmental entity; (b) governmental entity which owns the airport at which the tax was collected, if the airport is owned but not operated by a governmental entity; or (c) county in which is located the airport at which the tax was collected, if the airport is neither owned nor operated by a governmental entity. The governmental entity receiving the allocation must use it to pay the cost of: (i) transportation projects related to airports, including access on the ground to airports; (ii) the payment of principal and interest on notes, bonds or other obligations incurred to fund such transportation projects; (iii) promoting the use of an airport located in a county whose population is less than 400,000, including, without limitation, increasing the number and availability of flights at the airport; (iv) contributing money to the Fund; (v) pledges for the payment of general or special obligations issued to fund projects described above; and (vi) any combination of those purposes. The exception applies to counties whose population is 400,000 or more and in which a regional transportation commission has been created. In these cases, the non-optional excise tax on fuel for jet or turbine-powered aircraft sold, distributed or used in that county may also be allocated by the county to that regional transportation commission. The regional transportation commission must use this allocation to pay the cost of transportation projects described in a regional plan for transportation established by that regional transportation commission pursuant to NRS 373.1161, or to pay principal and interest on notes, bonds or other obligations incurred to fund projects described above, to pledge the payment of general or special obligations issued by the county at the request of the regional transportation commission to fund such projects, or for any combination of those purposes.

- **Excise Tax on Aviation Fuel (Aviation Gasoline).** The excise tax on aviation gasoline is intended to be used for aviation purposes. Pursuant to NRS 365.565, proceeds of taxes derived from aviation gasoline must be distributed quarterly from the Account for Taxes on Aviation Fuel. The amount of the optional tax must be remitted to the: (a) governmental entity which operates the airport at which the optional tax was collected, if the airport is operated by a governmental entity; (b) governmental entity which owns the airport at

which the optional tax was collected, if the airport is owned but not operated by a governmental entity; or (c) county in which is located the airport at which the optional tax was collected, if the airport is neither owned nor operated by a governmental entity. The permitted uses of these allocations are the same as those identified above for aviation jet fuel. The non-optional tax on aviation gasoline is transferred to the Civil Air Patrol Account. The amount transferred to the Civil Air Patrol Account must be expended for the support of the Nevada Wing of the Civil Air Patrol and is in addition to and separate from any legislative appropriations made to the Civil Air Patrol Account for the support of that Wing. Money in the Civil Air Patrol Account may be paid out only upon claims certified by the Wing Commander and the Wing Finance Officer and approved by the State Board of Examiners, in the same manner as other claims against the State are paid. Money in the Civil Air Patrol Account may be used only by the Wing to: (i) carry out its search, rescue and emergency operations, homeland defense and narcotics interdiction missions; (ii) maintain a headquarters; and (iii) purchase, maintain and repair emergency and training equipment. The Civil Air Patrol Account may not be used to purchase aircraft, or to pay for travel or training expenses.

7.12 Tax on the Shipment of Fuels By Pipeline

During one of the Study Committee meetings, information surfaced that a new tax on the shipment of fuels by pipeline may be under consideration. A small increment of such a tax could be a sustainable source of revenue for the Fund. Conversely, the tax will ultimately be borne by consumers throughout the state, even if the tax is initially imposed upon the shipper. More information is needed to assess the ultimate viability of this tax, if imposed, as a sustainable source of revenue for the Fund.

7.13 Combination of Funding Sources

The Study Committee agreed that if new taxes and fees were required, some combination of taxes and fees would be more realistic and sustainable than any one tax or fee. Obviously, there are many possible combinations. Table 17 identifies two possible combinations of excise taxes on fuels and aircraft registration fees.

Table 17
Study to Identify Sustaining Funding for Nevada Fund for Aviation
Potential Combinations of Funding Sources

Funding Source Description	New/ Incremental Rate	Incremental Revenue	
Excise Tax on Aviation Jet Fuel Sold Outside Clark/Washoe Counties	$0.0800/gallon	$379,200	
Excise Tax on Aviation Jet Fuel Sold Statewide	$0.0005/gallon		$237,000
Excise Tax on Aviation Gasoline Sold Outside Clark/Washoe Counties	$0.0800/gallon	$ 78,880	
Excise Tax on Aviation Gasoline Sold Statewide	$0.0500/gallon		$145,000
Aircraft Registration Fees (Statewide)	Average $50	$ 94,429	
Aircraft Registration Fees (Statewide)	Average $75		$141,643
Aircraft Property Tax Statewide	$0.0350 per $100	$ 48,358	
Aircraft Property Tax Statewide	$0.0500 per $100		$ 69,083
Totals		$600,867	$592,726

8.0 STUDY COMMITTEE

As noted previously, the Nevada Legislature directed NDOT to form a Study Committee consisting of NDOT staff, Nevada Department of Taxation staff, and airport and aviation professionals.

- James Mallery and William Thompson represented NDOT on the Study Committee, while Tom Summers represented the Nevada Department of Taxation.

- The Nevada Airport Managers Association (NAMA), individual airport owners and operators, and the Aircraft Owners and Pilots Association (AOPA) actively participated in four meetings and subsequent communications. Comments were solicited from the Civil Air Patrol

(CAP), Experimental Pilots Association (EAA), and the National Business Aircraft Association (NBAA).

- NDOT selected a consultant team led by Parsons Brinckerhoff Quade & Douglas (PBQD), with offices in Las Vegas and Reno, NV and Philadelphia, PA, to conduct the Study. Joining PBQD was John Eells of San Francisco, CA. The consultant team has significant experience in aviation and particularly in aviation funding sources. PBQD's project manager was the former executive director of the state aviation agency in Massachusetts and a former regional representative of the National Association of State Aviation Officials (NASAO).

The Study Committee proved to be a valuable resource. In addition to specific comments and recommendations, the majority of the Study Committee reached consensus on the following points:

- Sustainability of the sources of revenue for the Fund is critically important.

- New sources of revenue should be commensurate with realistic needs without creating an inequitable burden on a particular aviation consumer group and while maintaining Nevada's reputation for being a tax-friendly state.

- To the degree new taxes or tax increases are utilized, the State should consider adopting a combination of incremental increases in the excise taxes on aviation jet fuel and aviation gasoline fuels, an increase in aircraft property taxes, plus a new aircraft registration fee.

- The imposition and collection of the optional excise taxes on the sales of aviation jet fuel and aviation gasoline should be adopted in every county where there is an Eligible Airport. Only nine of the seventeen counties are collecting the optional excise tax on aviation jet fuel and only three of the seventeen counties are collecting the optional excise tax on aviation gasoline.

- The optional fuel excise tax revenue should not be considered as a source of revenue for the Fund. Eligible Airports should be permitted to use the optional excise tax revenue as part of the non-federal/non-NDOT share of AIP-eligible projects.

Copies of the presentations made to the Study Committee September 1, 2005, February 22 and June 1, 2006 as well as the presentation to the Nevada Airport Managers Association on April 24, 2006 are included in **Appendix F**. Meeting minutes are also included in this Appendix.

9.0 NEXT STEPS

The final Study Committee meeting was conducted on June 1, 2006.

PBQD will assist NDOT staff in presenting relevant information to the Interim Finance Committee (IFC) and to the Director of NDOT. These presentations are expected to occur within the months of September – October 2006.

The Nevada Airport Managers Association (NAMA) will convene a meeting of its Board of Directors, NDOT staff and other stakeholders to review, study and draft a set of recommendations for presentation to the NDOT Director and Interim Finance Committee (IFC) in preparation for the 2007 legislature.

NDOT will also finalize and distribute a manual to airports that sets forth NDOT's policies and procedures for the award of grants funded by the Fund for Aviation.

NEVADA DEPARTMENT OF TRANSPORTATION

ADDENDUM

STUDY TO IDENTIFY SUSTAINABLE FUNDING FOR THE NEVADA FUND FOR AVIATION

SEPTEMBER 25, 2006

PARSONS BRINCKERHOFF QUADE & DOUGLAS
3930 HOWARD HUGHES PARKWAY
SUITE 300
LAS VEGAS, NV 89109

TABLE OF CONTENTS

1.0 BACKGROUND

The Nevada Legislature (Senate Bill No. 526, Section 24, June 6, 2005) authorized the Nevada Department of Transportation (NDOT) to:

- Conduct a Study to identify sustaining funding sources for the Fund for Aviation (Fund), created by Nevada Revised Statute (NRS) 494.048
- Report NDOT's recommendations to the 74th Session of the Nevada Legislature
- Summarize the needs of rural airports, including, but not limited to, conditions of runways, lights for night operations, runway markings, available restrooms and telephones
- Form a Study Committee consisting of airport and aviation professionals, NDOT staff and Department of Taxation staff

NDOT's consultant, Parsons Brinckerhoff (PB), submitted a report to NDOT in September 2006 that identified the airports that are eligible for awards from the Fund, estimated the average annual need for funding, identified taxes and fees that are most commonly imposed upon aviation activities, identified and compared the taxes and fees used by eleven survey states to fund airport development projects, and discussed potential funding scenarios.

This Addendum has been prepared to:

- Provide additional information on how disbursements from the Fund were administered and used in 2006
- Report feedback from key stakeholders and others with expertise and experience in state funding on the importance of a stable source of funding in terms of enabling eligible airports to make a greater contribution than they otherwise could make if there were not stable funding to sustaining economic growth, new economic development, tourism, public safety, aerial fire fighting, mining, or land management
- Summarize information from the September 2006 Report

2.0 DISBURSEMENTS IN 2006

NDOT identified the airports that are listed in Table A-1 as being eligible for disbursements from the Fund.

Table A-1

Addendum to Study to Identify Sustaining Funding

For Nevada Fund for Aviation

Airports Eligible for Awards From the Fund

	Airport	**Sponsor**
1.	Alamo Landing Field	Bureau of Land Management
2.	Austin	Lander County
3.	Battle Mountain	Lander County
4.	Beatty	Nye County
5.	Boulder City Municipal	Boulder City
6.	Carson City	Carson City Airport Authority
7.	Derby Field	Pershing County
8.	Echo Bay	Overton
9.	Ely/Yelland Field	White Pine County
10.	Eureka	Eureka County
11.	Fallon Municipal	Fallon
12.	Gabbs	Nye County
13.	Goldfield	Bureau of Land Management
14.	Hawthorne Municipal	Mineral County
15.	Jackpot/Hayden Field	Elko County
16.	Mesquite	City of Mesquite
17.	Minden-Tahoe	Douglas County
18.	Owyhee	Shoshone-Paiute
19.	Pahrump	Town of Pahrump
20.	Panaca	Lincoln County
21.	Silver Springs	Lyon County
22.	Tonopah	Nye County
23.	Wells Harriet Field	City of Wells
24.	Winnemucca	City of Winnemucca
25.	Yerington	City of Yerington

Source: Nevada Department of Transportation

NRS 494.048 subsection 3. establishes the basic eligibility requirements for awards from the Fund. The awards are to be used to obtain matching money for federal programs and any other programs relating to airports or for the planning, establishment, development, construction, enlargement, improvement or maintenance of any airport, landing area or air navigation facility owned or controlled by the county, city or other

local government. NRS 494.048 subsection 6. excludes airports, landing areas and air navigation facilities that are owned or controlled by the Reno-Tahoe Airport Authority and any county whose population is 400,000 or more.

Reno/Tahoe International Airport and Reno/Stead Airport are ineligible because they are owned and operated by the Reno-Tahoe Airport Authority. McCarran International Airport, North Las Vegas Airport, Henderson Executive Airport, Jean Sport Aviation Center, and Overton Perkins Field are ineligible because they are owned and operated by Clark County, which has a population of more than 400,000.

Table A-2 identifies the disbursements from the Fund and offers a brief description of the uses of those state funds.

Table A-2

Addendum to Study to Identify Sustaining Funding

For Nevada Fund for Aviation

2006 Disbursements From the Fund

Airport	Project Descriptions	Total Project Costs	Funds Requested	Funds Awarded	% Of Total Costs
Austin	Rehabilitate airfield pavement, Runway 18-36	$ 88,105	$ 4,405	$ 4,405	5.0
Battle Mountain	Taxiway construction, markings, lighting, Rehabilitate Runway 03-21, other airport development, noise implementation	$ 1,012,000	$ 50,600	$ 50,000	4.9
Beatty	Rehabilitate Runway 16-34 and Taxiways, other airport development, noise implementation	$ 690,964	$ 34,548	$ 27,855	4.0
Carson City	Conduct environmental and Benefit/Cost Analysis, relocate Runway 09 and approach to Runway 27, other airport development, noise implementation	$ 5,657,895	$282,894	$ 50,000	0.9

Table A-2 (continued)

Addendum to Study to Identify Sustaining Funding

For Nevada Fund for Aviation

2006 Disbursements From the Fund

Airport	Project Description	Total Project Costs	Funds Requested	Funds Awarded	% 0f Total Costs
Derby Field	Airport Master Plan, other airport development, noise implementation	$ 315,790	$ 15,790	$ 15,789	5.0
Ely/Yelland	Rehabilitate existing aircraft apron, Phase I	$ 55,000	$ 2,750	$ 2,750	5.0
Gabbs	Improve Runway Safety Areas, rehabilitate Runways 08-26 and 16-34	$ 882,895	$ 44,145	$ 35,532	4.0
Jackpot-Hayden	Airport development, noise program implementation	$ 2,898,977	$144,949	$ 50,000	1.7
Lincoln/ Panaca	Taxiway "A", other airport development, or noise implementation	$ 170,000	$ 8,500	$ 8,500	5.0
Minden-Tahoe	Rehabilitate Runway 16-34, other airport development, noise implementation	$ 2,032,126	$101,606	$ 50,000	2.5
Owyhee	Prepare Environmental Assessment	$ 157,895	$ 7,895	$ 7,895	5.0
Pahrump	Update Airport Master Plan Study, prepare environmental baseline	$ 394,737	$ 19,737	$ 15,789	4.0
Silver Springs	Improve airport apron, weather reporting equipment, other airport development, noise program implementation	$ 988,421	$ 49,421	$ 50,000	5.0
Tonopah	Rehabilitate/improve Runways 11-29 and 15-33	$ 940,000	$ 47,000	$37, 821	4.0

Table A-2 (continued)

Addendum to Study to Identify Sustaining Funding

For Nevada Fund for Aviation

2006 Disbursements From the Fund

Airport	Project Descriptions	Total Project Costs	Funds Requested	Funds Awarded	% of Total Costs
Wells Harriet Field	Rehabilitate Runway 08-26, markings, lighting, and signage, other airport development noise implementation	$ 2,190,839	$109,542	$ 50,000	2.3
Winnemucca	Rehabilitate Runway 14-32	$ 692,379	$ 34,619	$28,129	4.0
Yerington	Update Airport Master Plan, other airport development, noise implementation	$ 348,686	$ 17,434	$ 15,535	4.5
Totals		$19,516,709	$975,835	$500,000	2.6

Source: Nevada Department of Transportation

The following are general observations on the above disbursements:

- The entire $500,000 available from the Fund was awarded to airports. NDOT did not use any of the available funding for administration of the program or other overhead.
- Some of the recurring themes in the project descriptions include:
  - Implementation of noise programs – 10 airports
  - Runway improvements or rehabilitation – 9 airports
  - Taxiway/aircraft apron improvements or rehabilitation – 5 airports
  - Planning studies/environmental analyses – 5 airports
- Seventeen (71%) of the twenty-four eligible airports applied for and received disbursements from the Fund.

- The following seven airports did not submit requests for funding to NDOT: Alamo, Boulder City, Eureka, Fallon, Goldfield, Hawthorne, and Mesquite.

- In order to make the Fund available to as many airports as possible, NDOT capped the disbursements to any one airport at $50,000. Six airports (Battle Mountain, Carson City, Jackpot-Hayden, Minden-Tahoe, Silver Springs, and Wells Harriet Field) were capped at $50,000. These six airports had requested a total of $739,012 ($239,012 more than the entire amount of the available funding). The combined requested amount of $739,012 represented approximately 5% of the $14,780,258 total costs of the projects at these six airports.

- Six airports received awards amounting to 5% of their respective total project costs (Austin, Derby Field, Ely/Yelland, Lincoln/Panaca, Owyhee, and Silver Springs).

- Five airports received awards amounting to 4% of their respective total project costs (Beatty, Gabbs, Pahrump, Tonopah, and Winnemucca).

3.0 VALUE OF HAVING A STABLE SOURCE OF FUNDING

It is fairly common to have airport projects completed in phases. In fact, grants from the Federal Aviation Administration (FAA) do not usually encompass planning, environmental analysis and permitting, design, and construction into one grant, unless the project is fairly simple and small. Therefore, often times the FAA will award multiple grants over a period of two or more years. However, it is quite common, and understandable, that the FAA would seek to be assured that the airport sponsor has secured the funding and/or a commitment for the funding needed to match the federal funds for the current and future phases and grants. In other words, the FAA would be reluctant to award a grant for the planning and environmental phase of a project if it did not have some level of assurance that the airport sponsor will also be able to cover the non-federal share of costs to design and construct a project.

NDOT identified key stakeholders and PB contacted each stakeholder to solicit their comments on the importance of having a stable source of funding for the purpose of enabling eligible airports to make a greater contribution than they otherwise could make to sustaining economic growth, new economic development, tourism, public safety, aerial fire fighting, mining, or land management if there were not stable funding. Following each telephone call with each stakeholder, PB sent an email to each stakeholder and asked them to confirm or edit PB's written understanding of their comments. The comments below represent the comments of each stakeholder resulting from this process.

Kay Bennett is the current president of the Nevada Airport Managers Association (NAMA) and, with her husband Hale, manages the Silver Springs Airport. Kay has been very active in the Study Committee and she has made significant contributions to the analysis completed to date. Ms. Bennett stated that the re-appropriation of $500,000 into the Nevada State Aviation Trust Fund is crucial for rural airports to receive the funding needed to support aviation throughout the state. The collection of other forms of aviation revenue including the Nevada license plate program is important; however, these non-traditional aviation revenue sources cannot support the entire system within the State. Investing money from the Nevada Aviation Trust Fund into rural airports serves as a catalyst for the creation for new taxable revenue with the local communities.

Stacy Howard is a representative of the Aircraft Owners and Pilots Association (AOPA). According to Ms. Howard, aviation provides about 3,300 jobs and more than $86 million in annual earnings in Nevada. Identified in the study are several sources of state revenue generated by aviation that could be directed into the State Aviation Trust Fund to help meet the 5% match for over $18 million in federal Airport Improvement Program funds allocated to Nevada's rural airports each year. Dedicating these resources to airport funding will assure vital aviation services are delivered to Nevada citizens. Aviation is not special interest.

Ms. Howard noted that Nevada's airports serve as on-ramps to the nation's air transportation system. Like highways, air travel requires access points to enter and exit the system. Like highways, airports and airways must be maintained under a management system that allows long term planning and set asides for future development. Like highways, airports and airways contribute to the economic vitality and qualify of life for Nevada citizens.

Ms. Howard added that air couriers deliver millions of pounds of small cargo to Nevada's rural airports and the Civil Air Patrol operates 14 squadrons throughout Nevada using general aviation airports to engage in search and rescue missions for hikers and downed aircraft, save lives by delivering emergency blood supplies, and fly hundreds of hours annually to aid US Customs Service. Nevada Highway patrol lands at all paved runways in the state for law enforcement and public safety purposes. Air ambulance services require a minimum of 4,500 feet of hard surface with instrument approach and lighted runways for night operations. Only a portion of Nevada's rural airports currently meet this important criteria.

Finally, Ms. Howard said that not just fortune 500 companies use aircraft in their business. Many small to medium companies locate within 10 miles of an airport in order to take advantage the speed and access that only a general aviation airport can provide to guarantee rapid delivery of time sensitive parts and assistance in inventory cost reduction. While 28 Nevada airports were eligible for small airport entitlements in 2002, only 18 qualified for their full $150,000 because of their inability to allocate matching funds for

previous grant offerings. A stable funding source for Nevada's rural airports will help assure that all Nevada airports maximize federal funding opportunities and maintain a more safe and efficient operating environment.

Jim Braswell is the Operational Services Director and Airport Manager of the Minden-Tahoe Airport. Like Kay, he has been very engaged in the Study Committee. Mr. Braswell commented that without having a stable funding source (the 95% match from the FAA and a 5% match split between the State and Local) literally none of the projects at the Minden Airport could be implemented. As a result, support for fire fighting, tourism and public safety would be significantly limited within the community.

Earl Doege is the Airport Manager of Hadley Airport. According to Mr. Doege, due to the fact the Hadley Airport is being leased from the Bureau of Land Management by the Round Mountain Gold Corporation, the Airport has not availed itself of funds from the Fund. As a result, all maintenance, improvements and operating costs have been privately funded. Round Mountain Gold Corporation is currently seeking to purchase the airport and may be interested in future funding.

Ron Lynch is the current manager for the Douglass County Mosquito Control Abatement District. Mr. Lynch said that farmers and ranchers do not depend upon mosquito control for their crops, but do appreciate the spraying of mosquitoes for the comfort and health of their livestock. If calves and feeder cattle are running around because of mosquitoes they do not gain weight and this cost the farmers and ranchers money. The Douglass County Mosquito Control Abatement District operates from the Minden-Tahoe Airport to support aerial spraying year round; however, the period from late April to September (mosquito season) represents the heaviest use of the Airport's facilities. The mosquito control would be lost without the airport, we are mainly concerned about the health and welfare of the public, the airport is necessary for the aircraft to spray mosquito areas that we cannot get to with our ground equipment, this summer the agricultural plane sprayed over 11,000 acres for the district, mainly because we had 18 confirmed cases of humans contacting West Nile Virus. The agricultural aircraft may use the airport year round as crops need care at different times of the year. Crops are fertilized by aircraft with liquid as well as solid commercial fertilizers at all times of the year. Weed control is also done by agricultural aircraft. During the growing season crops need to be sprayed for aphids and other insects and bugs.

Mike Rosaschi is the owner of Rosaschi Dusters Inc., which operates out of the Minden-Tahoe Airport. He notes that money from the Fund is needed to keep businesses on the Airport open. Without these funds, Airport facilities would fall into disrepair and impact the ability for businesses to survive. Having a stable funding source into the trust fund is crucial for the livelihood of the Airport and its associated businesses.

Trent Moyers is the Airport Director of the Elko Regional Airport and brings a unique perspective to this issue since he was also an employee of the NDOT and was heavily involved in the development and initiation of the Study. Without the Fund, rural airports in the state would not be able to meet the local matching fund requirements set by the FAA. Disbursements from the Fund are used to make repairs, build new facilities, and maintain existing services at rural airports throughout the state. Two services at the Elko Regional Airport which rely on the Fund are the Emergency Medical Service (EMS) and the mining industry. Both services are time-sensitive; therefore, they require the Airport to be maintained year round in order to provide 24-hour air ambulance and cargo support for the mining industry in Nevada. Rural airports depend on these funds for their long term stability.

John Sweeney is an Aviation Planner for the Aeronautics Division of the Colorado Department of Transportation. Mr. Sweeney said that the Colorado legislature does not allocate funds into the Colorado Aviation Trust Fund. All monies deposited in the Colorado Aviation Trust Fund come from taxes levied on the sale of both Jet A and Aviation Gasoline. Without the Colorado Aviation Trust Fund, airports in the state would not be able to meet local Federal Aviation Administration (FAA) grant match requirements, implement non-federally eligible projects and/or maintain a safe environment for airport users which is mandated by FAA requirements. In short, without a stable funding source (collection of fuel taxes) rural aviation facilities throughout Colorado would experience an immediate and negative long term impact.

4.0 SUMMARY OF SEPTEMBER 2006 REPORT

4.1 Needs

The Study used several methodologies to estimate the needs of the Eligible Airports.

- NDOT staff conducted a survey of the Eligible Airports to determine the primary types of needs and the estimated costs that would be incurred to address those needs. The primary needs were improvements to or rehabilitation of runways and taxiways. None of the eligible airports specified a need for funds to provide or improve restrooms or telephone service.

- The Study also reviewed the FAA's estimates of funds needed to develop Nevada's airports that are eligible to receive federal funding as reported in the National Plan of Integrated Airport Systems (NPIAS). (The NPIAS does not report development costs for projects that are ineligible for federal

funding even if the airport is eligible for federal funding. Therefore, the NPIAS forecasts are generally considered to be lower than actual needs.)

- The Study reported the current funding allocated by the FAA to eligible Nevada airports as being approximately $9,883,000. Note that the total of the costs of the projects included in Table A-1 were $19,516,709. The FAA is reportedly funding 95% of those costs, or $18,540,873. (The Fund and airport sponsors are each providing about half of the non-federal funds to leverage these federal dollars.) This difference is further indication of how airports rely on multiple years of FAA grants to fund projects. As noted above, the FAA looks to airport sponsors to document the future availability of non-federal funding for projects.

- The Study also included a survey of eleven state aviation agencies. Arizona, California, Idaho, Oregon, Utah neighbor Nevada. Alabama, Colorado, North Dakota, Oklahoma, Tennessee, and Wyoming were surveyed because their airport system, geography, or other characteristics were of interest to NDOT. North Dakota, Oklahoma and Oregon are independent state aviation agencies. The remaining eight survey state aviation agencies are a part of their respective state department of transportation. The survey identified, by state, the sources of funding used for state aviation programs, the total average annual funding for state aviation programs, the average annual administrative, education, operating expenses and refunds, the average annual funding for airport projects, and the number of airports that are eligible for state funding. Each of the eleven survey states award state funds to public-use airports, even those public-use airports that are not included in the NPIAS and, therefore, ineligible for AIP funds. On average, these eleven states award approximately $49,000 annually to each of the airports in their states that are eligible for federal funding. If the Fund were to provide a similar level of support to the 25 airports listed in Table A-1, the Fund would disburse an average of $1,176,000.

- Five of the eleven survey states use state funds to support airport development at privately owned airports that are operated for public use but are ineligible for federal funding.

Actual cash disbursements in any fiscal year often vary. Therefore, the demand upon the Fund may actually be more than or less than the amount of grants awarded in any fiscal year. The potential needs identified above represent average annual needs in a normalized state. In the near term, the actual annual demand will be somewhat lower. Some airports will not prepared to initiate projects in the first year because they do not have sufficient funds for their local match or they need to complete planning or

environmental permitting prior to starting certain projects. With this in mind, the Study suggested that consideration should be given to implementing new taxes and fees, if any, in increments so that tax collections are commensurate with actual demand. The annual needs should normalize somewhere in three to five years. Additional analysis of the actual ability of the airports to meet the eligibility requirements for awards from the Fund would be needed to determine a more accurate annual demand on the Fund in the first five years. Note that seven of the twenty-four eligible airports did not apply to NDOT for grants. Additional analysis should assess each airport's ability to provide its share of the local match needed to secure federal funds and should determine the extent to which each airport meets threshold requirements for federal funding in terms of the status of its airport master plan, airport layout plan and capital improvement plan. Given the likelihood that a sustaining funding source would involve new or increased taxes and fees, it is important to avoid building the Fund to levels that are inconsistent with a realistic demand on the Fund. In addition, some governments may benefit from the receipt of advice on developing multi-year budget forecasts for airport improvements, applying for federal funding, and developing innovative ways to reduce operating costs. Partnering with NAMA could be a productive, cost-effective approach to this information sharing.

4.2 State Taxes and Fees Imposed Upon Aviation Activities

This Section focuses upon the primary types of taxes and fees imposed by states upon aviation activities. In some cases, the tax revenue is allocated to non-aviation purposes including, but not limited to city/county relief, public safety, schools, and other forms of transportation.

4.2.1 Sales and Excise Taxes on Aviation Fuel

Currently, 20 states impose a sales tax and 33 states impose an excise tax on the sales/use of aviation jet fuel. Sales taxes range from 3.00% to 7.25% while excise taxes range from $0.001 to $0.090 per gallon. Nevada does not impose a sales tax on aviation jet fuel, but does impose a $0.010 per gallon excise tax.

Similarly, 15 states impose a sales tax and 41 states impose an excise tax on the sales/use of aviation gasoline. Sales taxes range from 4.00% to 6.50% while excise taxes range from $0.001 to $0.290 per gallon. Nevada does not impose a sales tax on aviation gasoline, but does impose a $0.020 per gallon excise tax.

For the eleven survey states, these taxes represented approximately 51% of the total revenue dedicated to airports for the survey states. Strictly speaking, taxes on aviation fuels in Tennessee are not dedicated to their airport development fund. Their fund is supported 100% by annual authorizations during the budget process. However,

the amount of aviation fuel tax revenue essentially supports the annual authorization. If for discussion purposes you assume that Tennessee's source of funds are fuel taxes, then fuel taxes represent 70% of the funding sources for the survey states. Colorado, Utah and Wyoming refund a portion of the fuel tax revenues to the airports where the tax was generated. Airports can use these funds for almost any legitimate operating expense or capital cost. Table A-3 reports these taxes by survey state.

Table A-3

Addendum Study to Identify Sustaining Funding

For Nevada Fund for Aviation

Survey Results: Taxes on Aviation Fuels

State	Jet Fuel Sales Tax	Jet Fuel Excise Tax	Aviation Gasoline Sales Tax	Aviation Gasoline Excise Tax	Average Annual Revenue ($000)	Percentage of State Funding Sources
AZ		$0.031		$0.050	500	3%
CA	7.250%	$0.020		$0.180	7,600	100.0%
ID		$0.045		$0.055	1,600	97%
OR		$0.010		$0.090	2,400	3%
UT		$0.090		$0.090	4,305	53%
NV		**$0.010**	**NA ***	**$0.020**	**NA ***	**NA ***
AL		$0.009		$0.027	600	28%
CO	3.00%	$0.040		$0.060	17,200	100%
ND		$0.080		$0.080	500	23%
OK		$0.001		$0.001	35	1%
TN					0	0%
WY		$0.050		$0.050	6,000	86%

Each county in Nevada is permitted to impose an additional $0.01 per gallon excise tax on aviation jet fuel and $0.08 per gallon excise tax on aviation gasoline. Clark County is further authorized to impose an additional $0.02 per gallon excise tax on aviation jet fuel. According to information provided by the Nevada Department of Taxation:

- Clark County is collecting both the optional $0.01 and the $0.02 excise taxes on aviation jet fuel, but not the optional $0.08 excise tax on aviation gasoline.

- Douglas, Elko and Humboldt counties are collecting both the optional $0.01 excise tax on aviation jet fuel and the optional $0.08 optional excise tax on aviation gasoline.
- Carson City, Lyon, Nye, and Washoe counties are collecting the optional $0.01 excise tax on aviation jet fuel.

In summary, nine of the seventeen counties are collecting the optional $0.01 excise tax on aviation jet fuel and only three of the seventeen counties are collecting the optional $0.08 excise tax on aviation gasoline. The Study recommended that the counties take full advantage of their taxing authority to support their airports.

Airlines are becoming more active in their opposition to fuel taxes based upon percentages. Since the cost of aviation jet fuel has reportedly increased nearly 400% over the past five years, their fuel tax related expenses have skyrocketed. Given the precarious financial position many airlines find themselves in, there is a reasonable chance that the airlines will be able to win some kind of relief, whether in the form of a rebate or changing the tax structure from a percentage to a fixed amount.

4.2.2 Property Tax

Twenty-one states impose property taxes on aircraft. The bases and rates vary significantly. Nevada currently charges $3.1122 per $100 of assessed value**.** These taxes are collected by the counties in Nevada. The success in collection of these taxes is difficult to evaluate. FAA aircraft registration data most often links the location of an aircraft with the location of its owner. If a company in Delaware leases an aircraft to someone who bases that aircraft in Nevada, the FAA aircraft registration data will most likely report that aircraft as being in Delaware and not Nevada.

Of the survey states, only North Dakota and Oklahoma use taxes on the sales of aircraft as a funding source. North Dakota collects approximately $365,000 annually, which represents 16% of their total funding sources. Oklahoma on the other hand collects approximately $3,000,000 annually, which represents nearly 88% of their total funding sources.

Of the survey states, only Arizona uses aircraft property taxes as a funding source. Their average annual collection of $12,000,000 represents 65% of their total funding sources.

4.2.3 Aircraft Registration Fees

Twenty-five states impose property taxes on aircraft. The bases and rates vary significantly. Nevada does not impose an aircraft registration fee. For reasons similar to

that discussed above, the success in collection of these registration fees can be difficult to evaluate and costly to implement.

Table A-4 summarizes survey state revenues associated with aircraft registration fees. With the exception of Arizona, Oklahoma and Oregon, these fees represent a relatively minor source of revenue to the survey states that impose these fees. In addition, several of the states suggested that collection of these fees required a significant effort and suggested that the net value of these fees after considering the costs of administration and collection should be considered.

Oklahoma has a provision whereby registration fees generated by aircraft with values in excess of $5,000,000 can be earmarked for the airport at which the aircraft is based.

Table A-4

Addendum to Study to Identify Sustaining Funding

For Nevada Fund for Aviation

Survey Results: Aircraft Registration Fees

State	Average Annual Revenue ($000)	Percentage of State Funding Sources
Arizona	6,000	33%
Idaho	40	2%
North Dakota	60	3%
Oklahoma	350	10%
Oregon	268	8%
Utah	200	2%

4.2.4 Other Taxes and Fees

With some minor exceptions, the following taxes and fees represent relatively minor sources of revenue:

- The state of Alabama acquired a number of military fields that were being closed as a part of the Base Realignment and Closure (BRAC) program. The state runs these airports and the average annual revenue of $350,000 represents approximately 16% of Alabama's funding sources. Alabama also receives an average of $1,200,000 annually from the Alabama DOT. This represents 56% of their funding sources. North Dakota receives an average

of $275,000 annually from the North Dakota DOT. This represents 12% of their funding sources.

- Fuel flowage fees contribute an average of $166,000 (5%) to Oregon's funding sources.
- North Dakota licenses aircraft dealers and aerial applicators. These fees produce a combined average of less than $12,000 annually.
- The state of Wyoming receives an average of $1,000,000 from tax revenue associated with mining operations. This transfer recognizes the role the state airport system plays in supporting that industry. These funds represent 14% of Wyoming's funding sources.
- Taxes imposed on automotive fuels contribute an average of $36,000(1%) to Oklahoma's funding sources and $120,000 (3%) to Oregon's funding sources.
- Idaho and Oregon impose a pilot registration fee, which produces an average of $10,000 and $40,000 annually respectively. North Dakota licenses aircraft dealers and aerial applicators. These fees produce a combined average of less than $12,000 annually. One state is considering using state lottery funds to support their state airport fund. Another is considering the transfer of a portion of an existing business tax to airports where the businesses depend upon the local airports for their existence.

4.3 Summary of State Aviation Agency Survey

With few exceptions, the survey states required some amount of local/airport participation in the funding of airport development projects that is not reimbursed by federal AIP grants. The local match was generally a fixed ratio with the state share ranging from 50% to 90%. Idaho adjusts its requirement for local match based on the population of the host community. Low population communities in Idaho receive higher percentages of state funds.

Table A-5 summarizes the amount of annual funding each survey state administers and the net amount of funds devoted to airport development projects after deductions for refunds to airports and funds allocated to administration, education and operating expenses.

Table A-5

Study to Identify Sustaining Funding

For Nevada Fund for Aviation

State Funding Dedicated to Airport Projects and State System Projects

State	Total Average Annual Funds ($000)	Administration, Education, Operations ($000)	Fuel Tax Refunds To Airports ($000)	Net Funding Available for Airport and State System Projects ($000)
Neighboring States				
Arizona	18,500	1,800	0	17,700
California	7,600	3,000	0	4,600
Idaho	1,650	400	0	1,250
Oregon	3,500	1,700	0	1,800
Utah	9,625	1,000	6,375	2,250
Other States				
Alabama	2,150	700	0	1,450
Colorado	17,200	860	12,060	4,280
North Dakota	2,225	730	0	1,495
Oklahoma	3,421	1,000	0	2,421
Tennessee	17,000	0	0	17,000
Wyoming	7,000	0	4,800	2,200

The five neighboring survey states award between $24,000 (California) and $305,000 (Arizona) on average annually to airports in their states that are eligible for federal funding, for a five-state average of approximately $73,000 per year. If Arizona is deleted, the four state average would be approximately $30,000 per year. If Nevada dedicated an average of $30,000 annually to the 25 eligible airports listed in Table A-1, the average annual demand on the Fund would be approximately $720,000.

Similarly, the six other survey states award between $20,000 (Alabama) and $243,000 (Tennessee) on average annually to airports in their states that are eligible for federal funding, for a six-state average of approximately $76,000 per year. If Tennessee is deleted, the five state average would be approximately $27,000 per year. If Nevada

dedicated an average of $27,000 annually to the 25 eligible airports listed in Table A-1, the average annual demand on the Fund would be approximately $648,000.

5.0 REVIEW OF FUNDING SOURCES

The Study Committee sought to identify sufficient, sustainable revenue sources for the Fund that would leverage available federal AIP funds and make such other investments as needed to meet the demand for facilities at public use airports while maintaining Nevada's reputation for being a tax-friendly state. Sufficiency, sustainability, and the relationship of the new/increased taxes to neighboring states are the key criteria for evaluating the funding sources. The Study assumed that there would not be a reallocation of aviation related tax revenue from its current non-aviation purposes back to aviation. To the degree the demand for aviation related tax revenue for non-aviation uses subsides in the future, if at all, then the reallocation of that revenue could be considered a viable source of revenue for the Fund.

5.1 Sales Tax on Aviation Jet Fuel Sold/Purchased Outside of Clark and Washoe Counties

Approximately 4,740,000 gallons of aviation jet fuel are sold per year in counties other than Clark County and Washoe County. The fixed base operator at Carson Airport posted a selling price of $3.92 per gallon on August 12, 2006. Using this selling price as an average, a new sales tax of approximately 0.54% is needed to generate each $100,000 in new tax revenue, which would increase the net cost to the consumer by approximately $0.021 per gallon. If the goal is to generate $300,000 in new tax revenue, the new sales tax would have to be 1.62% (3 times 0.54%), which would increase the net cost to the consumer by approximately $0.063 per gallon.

Only California has a sales tax on aviation jet fuel, which is 7.25%. Airlines are exempt from this tax.

5.2 Sales Tax on Aviation Jet Fuel Sold/Purchased Statewide

Approximately 474,000,000 gallons of aviation jet fuel are sold per year in Nevada. Most of this fuel is sold to the airlines. Using an estimated weighted average selling price of $3.00 per gallon, a new sales tax of approximately 0.007% is needed to generate each $100,000 in new tax revenue, which would increase the net cost to the consumer by approximately $0.00021 per gallon. If the goal is to generate $300,000 in new tax revenue, the new sales tax would have to be 0.021% (3 times 0.007%), which would increase the net cost to the consumer by approximately $0.00063 per gallon. While

this amount may sound small, any attempt to add new tax debt upon the airlines will meet with considerable resistance.

As noted above, only California has a sales tax on aviation jet fuel, which is 7.25%. Airlines are exempt from this tax.

5.3 Sales Tax on Aviation Gasoline Sold/Purchased Outside of Clark and Washoe Counties

Approximately 986,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. The fixed base operator at Carson Airport posted a selling price of $4.30 per gallon on August 12, 2006. Using this selling price as an average, a new sales tax of approximately 2.36% is needed to generate each $100,000 in new tax revenue, which would increase the net cost to the consumer by approximately $0.101 per gallon. If the goal is to generate $300,000 in new tax revenue, the new sales tax would have to be 7.08% (3 times 2.36%), which would increase the net cost to the consumer by approximately $0.304 per gallon.

None of the neighboring states impose a sales tax on aviation gasoline.

5.4 Sales Tax on Aviation Gasoline Sold/Purchased Statewide

Approximately 2,900,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. Sales of aviation gasoline in Nevada have been trending downward. Using an estimated selling price of $4.30 per gallon, a new sales tax of approximately 0.80% is needed to generate each $100,000 in new tax revenue, which would increase the net cost to the consumer by approximately $0.034 per gallon. If the goal is to generate $300,000 in new tax revenue, the new sales tax would have to be 2.4% (3 times 0.80%), which would increase the net cost to the consumer by approximately $0.103 per gallon.

As noted previously, none of the neighboring states impose a sales tax on aviation gasoline.

5.5 Excise Tax on Aviation Jet Fuel Sold/Purchased Outside of Clark and Washoe Counties

Approximately 4,740,000 gallons of aviation jet fuel are sold per year in counties other than Clark County and Washoe County. A new excise tax of approximately $0.021 per gallon is needed to generate each $100,000 in new tax revenue. If the goal is to generate $300,000 in new tax revenue, the new excise tax would have to be $0.063 per gallon (3 times $0.021).

Nevada imposes a $0.01 per gallon excise tax on aviation jet fuel. The five neighboring states impose the following per gallon excise tax on aviation jet fuel:

- Arizona - $0.031
- California - $0.020
- Idaho - $0.045
- Oregon - $0.010
- Utah - $0.090 (Utah refunds nearly 67% of the fuel tax revenue to airports.)

5.6 Excise Tax on Aviation Jet Fuel Sold/Purchased Statewide

Approximately 474,000,000 gallons of aviation jet fuel are sold per year in Nevada. Most of this fuel is sold to the airlines. A new excise tax of approximately $0.00021 per gallon is needed to generate each $100,000 in new tax revenue. If the goal is to generate $300,000 in new tax revenue, the new excise tax would have to be $0.00063 per gallon (3 times $0.00021).

An increase of $0.0013 per gallon would have essentially no effect on the relationship of Nevada's excise tax on aviation jet fuel to that of the neighboring states. However, the airlines would most assuredly oppose this tax increase.

5.7 Excise Tax on Aviation Gasoline Sold/Purchased Outside of Clark and Washoe Counties

Approximately 986,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. A new excise tax of approximately $0.101 per gallon is needed to generate each $100,000 in new tax revenue. If the goal is to generate $300,000 in new tax revenue, the new excise tax would have to be $0.303 per gallon (3 times $0.101).

Nevada imposes a $0.020 per gallon excise tax on aviation gasoline. However, counties may impose an additional $0.08 per gallon. An increase of even $0.101 per gallon would put Nevada state excise taxes higher than every other neighboring state other than California:

- Arizona - $0.05
- California - $0.180
- Idaho - $0.055

- Oregon - $0.090
- Utah - $0.090

5.8 Excise Tax on Aviation Gasoline Sold/Purchased Statewide

Approximately 2,900,000 gallons of aviation gasoline were sold in calendar year 2004 in counties other than Clark County and Washoe County. A new excise tax of approximately $0.034 per gallon is needed to generate each $100,000 in new tax revenue. If the goal is to generate $300,000 in new tax revenue, the new excise tax would have to be $0.102 per gallon (3 times $0.034).

As noted above, Nevada imposes $0.020 per gallon excise tax on aviation gasoline. An increase of $0.034 per gallon would put the Nevada excise tax rate only slightly higher than Arizona's and lower than each of the other neighboring states' rates.

5.9 Aircraft Property Tax

Based on the current rate of $3.1122 per $100 of assessed value, Nevada counties are collecting approximately $4,300,000 annually in aircraft property taxes. To generate $100,000 in new tax revenue, an increase in the property tax of $0.0724 per $100 would be required. Additional data would have to be collected from the counties and analyzed to determine the net effect of such an increase on the average property tax per aircraft.

Of the neighboring states, only Arizona imposes aircraft property taxes.

5.10 Aircraft Registration Fees

Nevada does not impose an aircraft registration fee at this time. The following states have aircraft registration programs and their average registration fee per based aircraft is reported below:

- Arizona: $829
- Idaho: $16
- North Dakota: $296
- Oklahoma: $860
- Oregon: $62

According to the NPIAS, there are 2,684 aircraft based in Nevada. An average registration fee of $50.00 per based aircraft could generate $132,200 in annual revenue.

There would likely be some expense incurred in administering this new program. For discussion purposes only, and based primarily upon the PBQD's project manager's experience as the former state aviation director in New England, such a program could be administered by one full time person with the right software and computer program. Initial startup costs could be in the range of $5,000 to $10,000 for the computer, software and initial paper stock. Ongoing wages and benefits plus other expenses associated with mailings, etc. could average an additional $35,000 to $40,000 annually. Increasing the average aircraft an additional $0.75 would recover the initial startup costs in five years. Increasing the average registration fee an additional $15.00 would offset the estimated expenses for administering the program. These two increases, if implemented, would increase the average aircraft registration fee to $70.00 per aircraft.

5.11 Tax on the Shipment of Fuels By Pipeline

During one of the Study Committee meetings, information surfaced that a new tax on the shipment of fuels by pipeline may be under consideration. A small increment of such a tax could be a sustainable source of revenue for the Fund. Conversely, the tax will ultimately be borne by consumers throughout the state, even if the tax is initially imposed upon the shipper. More information is needed to assess the ultimate viability of this tax, if imposed, as a sustainable source of revenue for the Fund.

5.12 Combination of Funding Sources

One of the goals of the Study was to identify and evaluate various funding sources employed by other state aviation agencies. The Study was not intended to identify the single best source or combination of sources of funding.

One option for Nevada is to continue to make bi-annual allocations from the legislature to the Fund. The FAA would likely look to the balance of the Fund on a year to year basis to determine whether sufficient funds are available to move forward on multi-year/multi-phase projects. If the Fund is drawn down substantially each year, there may be insufficient funding to convince the FAA to fund the early phases of important projects.

Another option is to focus on one new source of funding. To generate a reasonable level of funding from aviation activities outside of Clark and Washoe Counties, a new, single tax or fee would have to be substantial and would likely have a negative impact on those aviation activities. Any tax or fee imposed upon the airlines would likely meet with great opposition.

The Study Committee agreed that if new taxes and fees were required, some combination of taxes and fees would be more realistic and sustainable than any one tax or

fee. Obviously, there are many possible combinations. The most appropriate combination should be developed with sustainability and consumer impacts in mind. One possible combination offered for illustrative purposes only might be as follows:

- Increase the state excise tax on aviation jet fuel by $0.04 per gallon, thereby generating an additional $189,000 per year (this would make Nevada's rate $0.05, which would be slightly higher than Idaho ($0.045), about half of Utah's rate ($0.09, but Utah currently refunds 67% to the airports), and more than the rates in Arizona, California and Oregon ($0.031, $0.020 and $0.010 respectively).

- Increase the state excise tax on aviation gasoline by $0.05 per gallon, thereby generating an additional $49,300 per year (this would make Nevada's rate $0.070 per gallon as compared to Arizona at $0.05, Idaho at $0.055, Oregon and Utah at $0.090 and California at $0.180.

- Increase the aircraft property tax rate by $0.0724 per $100 of assessed valued, thereby generating an additional $100,000 per year.

- Instituting a new aircraft registration program with an average annual registration fee of approximately $70 per aircraft would generate an estimated net revenue of $132,000 per year.

- The sum of these actions represents an estimated annual revenue of $470,300 per year.

6.0 NEXT STEPS

NDOT staff will present relevant information to the Interim Finance Committee (IFC) and to the Director of NDOT. These presentations are expected to occur in February 2007. The Nevada Airport Managers Association (NAMA) convened a meeting of its Board of Directors, NDOT staff and other stakeholders and is drafting a set of recommendations for presentation to the NDOT Director and Interim Finance Committee (IFC) in preparation for the 2007 legislature. NDOT will also finalize and distribute a manual to airports that sets forth NDOT's policies and procedures for the award of grants funded by the Fund for Aviation.