Case Study

Transportation Economic Issues in the Proposed Annexation of Wendover, Utah

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Abstract

In 2002, the residents of Wendover, Utah voted in favor of annexation by the adiacent West Wendover, Nevada. While Wendover is blighted, West Wendover thrives in a gaming-based economy. The legislative process is lengthy because of the proposed realignment of the Nevada-Utah boundary. This paper examines the transportation-related implications of the proposed annexation. The capital value of Wendover's transportation assets is about \$40.6 million (U.S. \$2003), although attention has been directed toward the Wendover Airport and an associated debt that had grown to \$27 million by early 2006. Wendover's annual tax revenue per km of road would increase from \$22,800 to \$43,300 following annexation. The additional funding would be useful in improving Wendover's streets, 72% of which were either poor or unpaved in a June 2005 survey. There would be an immediate annual transportation cost increase of \$725 per household in Wendover from higher licensing and registration fees, insurance premiums, and fuel taxes. City and county officials in Nevada were wrestling with being responsible for the airport's debt, forcing officials in Utah to consider alternatives to annexation. One alternative would be to further develop the airport, and establish stronger linkages to nearby attractions.

1.0 Introduction

On November 5th, 2002, residents of the bordering cities of Wendover, Utah and West Wendover, Nevada (2000 populations: 1,526 and 4,724, respectively) voted in favor of unifying their two cities. The unified Wendover would be in Nevada, although the name of the new city had not been specified as of this writing. In August 2004, a Nevada public lands subcommittee voted unanimously to ask the Nevada legislature to urge the U.S. Congress to authorize the annexation of Wendover by West Wendover (Work session document, 2004). As explained by Tooele County (Utah) Commissioner Matthew Lawrence (Almeida, 2004):

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"The people (of these communities) need to be together. The blight in Wendover, I believe, is caused by the separation of the communities. We do not have the economic base to drive the development of Wendover, Utah."

Stephen Perry, the mayor of Wendover, described the situation as follows ("Economic development," 2001):

"It's really day and night. In the last ten years, West Wendover's population has grown while ours has stayed the same or gotten even smaller. We've got sub-standard housing, and we've had bankruptcies. Our businesses are really struggling. (With the merger) we would have one city attorney, one city manager, one police department. We could save \$250,000 a year by sharing services."

At issue is a growing economic and quality-of-life gap between the two cities. A survey found that 38% of the housing in Wendover was either deteriorated or dilapidated (WFRC, 2005). In contrast, the West Wendover economy is energized by Nevada's gaming industry. Five casino-hotels, for which the majority of visitors are, ironically, from Utah, are magnets. According to the 2000 Census, 75.3% of West Wendover's and 59.2% of Wendover's employees worked in the hotels and casinos (U.S. Census data). There are several motels in Wendover, but most tourist spending takes place in West Wendover. As of the late 1990s, 337 persons worked in Wendover, mostly in the service and trade sectors (Tooele County, 1999). In comparison, West Wendover had about 2,000 jobs in the city's casinos and hotels. The annexation, if approved, would invoke the first realignment of the boundaries of any two States since 1867, when the northwestern corner of Arizona was transferred to Nevada ("Territorial evolution"). The proposal had stalled at higher levels of government as of June 2005 (Davidson, 2005), although the two cities had been working toward a variety of compromises (Scott, 2004). The purposes of this paper are to examine the transportation-related costs of the proposed annexation, and discuss how the local airport and other attractions may be used to boost Wendover's economy.

2.0 History

Wendover and West Wendover straddle the Utah-Nevada state line at the western edge of the Great Salt Lake Desert; the closest major cities are Salt Lake City, Utah, 195 km to the east, and Elko, Nevada, 177 km to the west (see Figure 1). There is no physical barrier between the two cities. Wendover, Utah was established in 1907 as a water, fuel and supply stop on the Western Pacific Railroad. In 1914, the city was the site of the completion of the first transcontinental telephone line. Later, the city became a supply center for sheep and cattle ranchers in the region. In the 1930s, the potassium chloride ("potash") industry was established locally, and the State of Nevada legalized gambling. The Wendover Air Base, located in Utah immediately south of Wendover, was activated in 1942 as the training site for the Enola Gay, and the crew that would

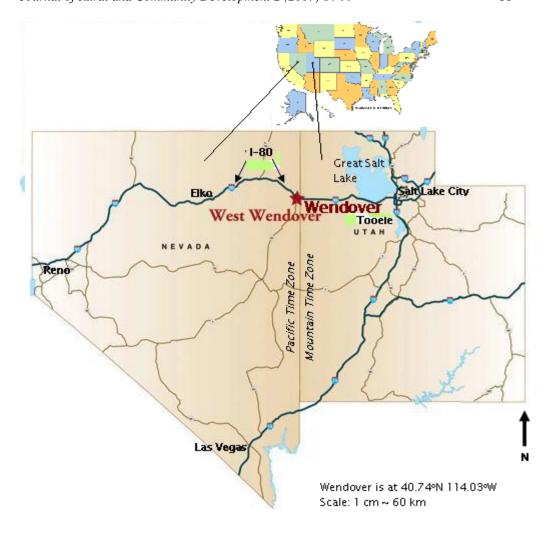


Fig. 1 Regional Map (www.westwendovercity.com)

drop atomic bombs on Japan. During World War II, the military presence in Wendover peaked at 19,500. Following the War, gambling gained popularity on Wendover's "Nevada" side. The first casino opened in 1952. The U.S. Air Force deactivated the air base in 1961, and the military presence in Wendover dwindled. Between 1969 and 1976, the I-80 freeway, which passes through Wendover and West Wendover, was completed across the Great Salt Lake Desert and the mountains to the west, effectively completing the 4,695-km cross-country highway. In 1976, the airfield was declared surplus by the U.S. Air Force, deeded to Wendover, and renamed Wendover Airport. The railroad's importance faded; although train activity is steady (11 daily trains in 2005), there is no local business along the line (Hill, Hibbitts, and Clarke, 1991). Further, Amtrak's California Zephyr line between Chicago and California was running only one train per day (formerly two), with no local stop. With the airport seeing a minimal amount of activity, I-80 became the Wendover area's lifeline. Growth on the Nevada side was affirmed by the incorporation of West Wendover as a city in 1991 (Constantino, 2002).

2.1 Annexation

Holmes (1996) tabulated the 107 State borders in the U.S. City pairs that straddle two States are about as common as the borders themselves. The Wendover-West Wendover case is unique, though, in that no other bordering city pairs were looking to consolidate, thereby requiring a shift in State lines. The critical factor is that Utah is one of only two States in the U.S. in which gaming is illegal. The economic disparity between Wendover and West Wendover, discussed in the next section, is directly related to this. Other differences can emerge in bordering city pairs, however. Coats (1995), for example, found that differences between the cigarette tax rates of bordering States was a controlling factor in 80% of cigarette sales. Rectifying economic differences between bordering jurisdictions can be a challenge, particularly if the entities are subject to different tax rates, taxation laws, prohibitions, and other legalities. For example, in West Wendover, as of Jan. 1, 2005, the "beer tax" was \$0.16/gal, plus a 6.5% sales tax. In Wendover, the beer tax was \$0.41 to \$0.55/gal, plus a 10% sales tax ("Alcohol tax rates 2004").

Some of the impacts of annexation include higher average incomes, lower levels of economic and racial segregation, higher tax bills, and reduced resources for infrastructure and service than in areas with little annexation (Liner and McGregor, 2002). Austin (1999) reported that cities annex to increase the municipal tax base, lower the cost of municipal services, control development on the urban fringes, alter the "fabric" of the population, and grow. Austin also observed that political choices often overrode economic factors in annexation decisions. The earlier quote from Wendover's mayor suggests that one of the objectives of annexation would be to streamline municipal government. A desirable consequence would be the redirection of funds to social services, education and other needs. Liner (1992), however, forecast increased "municipal bureaucratic inefficiency" following annexation, in part because of increased administrative duties.

3.0 Setting and Statistics

Wendover is located in Tooele County (2000 pop.: 40,735). Most of the county's residents live in the Tooele small urban area, some 160 km east of Wendover. Wendover is separated from these communities by the vast expanses of the Great Salt Lake Desert, which features four U.S. military ranges and testing centers. West Wendover is located in Elko County (2000 pop.: 45,261). Most of Elko County's residents live in the Elko small urban area, 177 km west of West Wendover. Although the dividing line between the Pacific and Mountain Time Zones runs along the Utah-Nevada border, West Wendover operates on Mountain Time as a convenience to the city's many Utah visitors. A map of the vicinity is shown in Figure 2.

A few socioeconomic comparisons between Wendover and West Wendover are listed in Table 1. According to the 2000 Census, Wendover's unemployment rate was 33% greater than that in West Wendover, and the median household value in West Wendover was 1.6 times that in

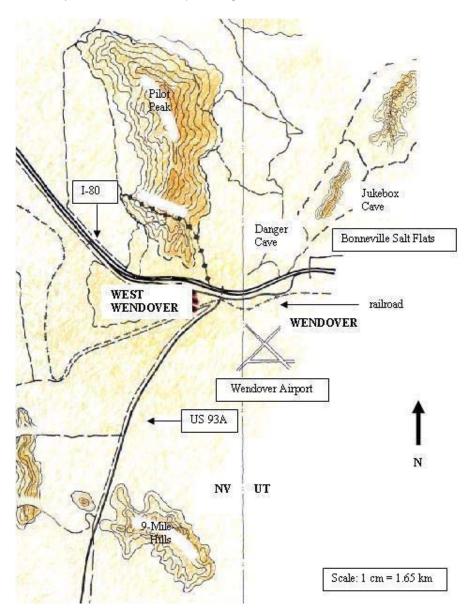


Fig. 2 Wendover-West Wendover Vicinity (www.westwendovercity.com)

Wendover. The proportion of households with no motor vehicle in Wendover was more than twice that in West Wendover. Notably, both Wendovers are predominantly Hispanic; Spanish, in both cities, is more commonly spoken at home than English. The dominant employment sector in both cities is recreation, entertainment, accommodations and food services. Sixty percent of the workers living in Wendover were working out-of-state, presumably in West Wendover. Between 1990 and 2003, the rate of growth in both Wendovers was high, although West Wendover's was more than twice that of Wendover (U.S. Census data). Despite the high growth *rates*, Jones and Jones et al. (2002) predicted that there would be limited population *growth* in the area through year 2020.

Table 1. Wendover and West Wendover Statistics (2000, except as noted)

Statistic	Wendover,	West Wendover,	
	Utah	Nevada	
Population (1990)	1,127	2,030	
Population (2000)	1,526	4,724	
Population (2003)	1,620	4,857	
K-12 students	335 (22.0%)	1,154 (24.4%)	
Age \geq 65 years	62 (4.1%)	127 (2.7%)	
Employees ^a	638 (56.5%)	2,529 (73.5%)	
Unemployment rate	5.6%	4.2%	
Employees in recreation,			
entertainment,	378 (59.2%)	1,826 (75.3%)	
accommodations and food			
services			
Owner-occupied housing units	174 (42.0%)	760 (55.7%)	
Median household income	\$31,196	\$34,116	
Median household value	\$84,000	\$131,600	
Median contract rent	\$391	\$435	
Families below poverty level	72 (24.7%)	187 (17.3%)	
Zero-vehicle households	79 (19.1%)	102 (7.5%)	

^a The employees percentage is that relative to the working-age population. http://factfinder.census.gov.

4.0 Transportation Setting and Issues

The primary economic development asset of Wendover and West Wendover is their location along I-80. West Wendover's accessibility is especially evident in that 60% of the Salt Lake City, Ogden and Provo, Utah urbanized areas' gaming expenditures are captured by the city; most of the remaining 40% goes to Las Vegas and Mesquite, Nevada (ADE, 2002). In 2003, the average daily traffic volume on I-80 was 5,995 at the Nevada-Utah state line, and 7,690 east of Wendover (UDOT, 2003). The average daily "loss" of 1,695 vehicles was an indicator of the pull that the Wendover area has on travelers who originate in Utah. The Wendover Airport is a secondary transportation asset, but a primary economic asset, as discussed in the following sections.

Although local business and economy issues are at the forefront of the pending annexation, several transportation-related issues are of concern. The local media, for example, have emphasized the Wendover Airport, which would be sold to the State of Nevada by Tooele County. One consequence of the turnover of airport ownership would be the transfer of a debt that Tooele County incurred as a result of its investment in improvements. The debt had grown to \$27 million by early 2006. Also, West Wendover would assume ownership of Wendover's street system, and the associated costs of maintenance and improvement, while duplicitous public works divisions would be eliminated. Related to the change of ownership would be a shift in transportation funding sources, with an associated change in the amounts. Further, since motor vehicle registration, insurance, and

driver licensing fees have traditionally been higher in Nevada than in Utah, the personal transportation costs of Wendover's residents would increase. The following sections discuss each of these four transportation concerns.

4.1 Wendover Airport

Annual activity at the Wendover Airport, as of May 2005, included 8,100 general aviation transient, 60 general aviation local, and 1,000 military operations. There were, on average, 25 daily flights ("Wendover Airport data"). As of May 2005, a collaboration of the casinos in West Wendover was providing daily direct flights between Wendover Airport and about 20 U.S. cities on a trial basis. Keahey (2000) wrote about the long wait for the resumption of air service, which had been discontinued in 1997 after a fairly successful four-year run. A peak of 70,000 annual enplanements was reached during this period. After 1997, Tooele County continued to modernize the airport, including the introduction of a \$5 million, 2,438-m (8,000-ft) runway, new roofs on the aircraft hangars, and other improvements (Van Eyck, 2000).

Ownership of the Wendover Airport was transferred from the City to Tooele County in 1998. The airport operates under the jurisdiction of the Utah Aeronautics Division, which functions within the Federal Aviation Administration's (FAA's) Mountain West Region. A transfer of ownership would place the airport under the jurisdiction of the State of Nevada, becoming part of the FAA's Western Pacific Region. Because this region has a larger number of commercial and primary service airport facilities than the Mountain West, the Wendover Airport would face a greater amount of competition for federal monies (ADE, 2002).

A March 2005 Nevada legislative subcommittee report recommended that the Utah Legislature and Tooele County agree to deliver the Wendover Airport (along with other public facilities) to West Wendover free and clear of any and all debt (Scott, 2005). The airport's value was evident, however, in that commercial passenger service operations were forecast to reach 12 flights per day in 2005; by 2015, there are expected to be 16 per day and 250,000 annual passengers. General aviation operations were forecast to increase to 20,300 flights in 2005, and 28,700 in 2015 (Tooele County, 1999). Revenues generated by these activities could eventually cancel the debt, although actual 2005 operations were at about 55% of those forecasted. The local metropolitan planning organization (MPO) forecast that the number of aircraft based at the airport would increase from nine in 2005 (seven were actually based there as of May 2005) to 15 in 2015 (WFRC, 2004). Tooele County's improvements were intended to accommodate year 2005 forecasts, while the proposed addition of a 4,267-m (14,000-ft) runway would prepare the airport for ultimate, year 2050 projections. Airport revenue sources associated with these operations include aircraft parking fees, passenger facilities charges, air carrier fees, and aviation fuel sales. The airport is home to a free historical museum that commemorates the facility's role in World War II ("Wendover Airport information"). The property adjacent the Wendover Airport has, for a long time, been considered prime real estate for airfront development. The airport's significance during World War II could be exploited through the promotion of historic facilities, including the existing museum, old hangars, and other memorabilia. The airport, therefore, has a revenue-generating potential that extends beyond its transportation services.

4.2 City Transportation Infrastructure

Other assets include Wendover's streets, sidewalks, traffic signs and lighting. One state highway, Utah's State Route 58 (SR 58), runs east-west (as Wendover Blvd.) through the city (see Figure 3). Once in Nevada, the ownership of Wendover Blvd. transfers to West Wendover. The results of a June 2005 field inventory are summarized in Table 2. The City of Wendover featured 17.2 km of streets, including SR 58, 10.0 km of sidewalk, 99 street signs, and 22 streetlights. Pavement markings were not inventoried. Four different pavement conditions were observed: good, fair, poor and unpaved. The condition ratings were derived from those used in Goodspeed (1992) for pavement management in small cities with limited resources.

- 2.2% of the streets were in good condition.
- 25.8% were in fair condition.
- 56.9% were in poor condition.
- 15.1% were unpaved (i.e., dirt roads).

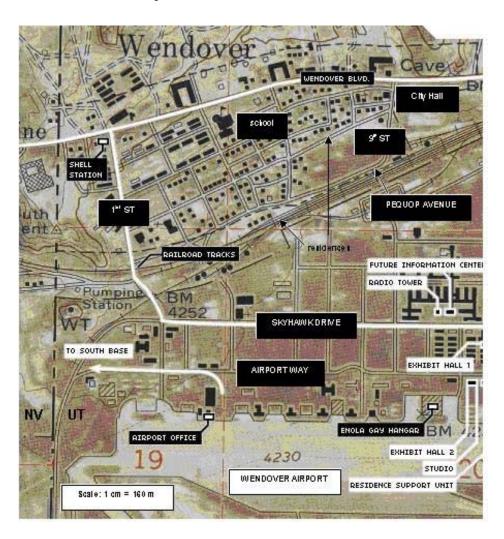


Fig. 3 City of Wendover, Utah (I-80 runs just to the north of this image)

The preceding list excludes SR 58, which was in good condition. Fair pavement needed minor interventions, such as crack seals or patching, while poor and unpaved surfaces needed major rehabilitation. All of the sidewalks and signs were observed to be in good condition.

Table 2. Wendover Transportation Infrastructure

Infrastructure	Description	Amount	Condition
Pavement	Pavement 2-lane roads		Good
		3.81 km	Fair
		8.42 km	Poor
		2.24 km	Unpaved
	4-lane road (SR 58)	2.00 km	Good
Railroad grade crossing	Flashers and gates	1	Unknown
Sidewalks	Located along 8 streets	10.00 km	Good
Street lights	Independent poles	20	Unknown
	Utility poles	2	Unknown
Street signs	Delineators (along SR 58)	21	Good
	Railroad	1	Good
	Regulatory	70	Good
	School & warning	7	Good

NOTE: Data based on a June 2005 field visit by the author.

Wendover Blvd. is, by far, the most heavily used road in Wendover, carrying an annual average daily traffic volume (AADT) of 13,200 near the Nevada state line in 2003 (UDOT, 2003). Traffic volumes were not obtained for the other streets in Wendover, but their AADTs, in serving residential and local development, are probably no greater than several hundred. Based on an estimated annual travel volume of 5.37 million vehicle-km in West Wendover (Nevada DOT 2004), on 25.00 km of roads, roughly 3.23 million vehicle-km were traveled on Wendover's 17.2 km of streets in 2003 (accounting for the lower vehicle ownership). A nighttime inspection of streetlights was not conducted. Drainage facilities were not examined. An inventory of the transportation infrastructure in West Wendover was not performed.

4.3 City Transport Infrastructure Valuation

One perspective is that the proposed annexation of Wendover would result in the losses of transportation infrastructure assets on the Utah side, and gains on the Nevada side. Amekudzi et al. (2002) described several approaches to evaluating civil infrastructure assets, including book value, market value, and others. For this study, the written-down-replacement-value (WRDV) methodology was applied (Cowe Falls, Haas, and Tighe, 2004). The WRDV is based on the type of infrastructure, a recent measure of performance, and an estimate of the construction costs (i.e., replacement costs) of the facility. The lack of a comprehensive, local database precluded the use of other methods that required such data as age and maintenance history.

The value of Wendover's street system was estimated according to the cost of replacing each infrastructure component, *minus* the cost of repairing any

deterioration. The following replacement costs (U.S. \$2003, composite values from multiple sources) were used:

•	Railroad crossing	\$400,000
•	Sidewalks	\$720 per m
•	Streets	\$930,000/km
•	Street lights	\$3,000 per light

• Traffic signs \$500 each (average, including sign,

support and foundation)

Streets in fair condition were assumed to need a combination of slurry and chip sealing at \$2.05/m², and streets in poor condition needed a thick asphalt overlay at \$7.75/m² (Noeimi, 1999, updated to U.S. \$2003). Unpaved streets were assumed to need paving at a cost of \$62,000/km. Based on these figures, the value of Wendover's street infrastructure was estimated to be \$22.6 million, including \$14.8 million for streets, \$7.2 million for sidewalks, \$66,000 for street lights, \$49,500 for traffic signs, and \$400,000 for one railroad crossing. Streets in poor condition needed repairs costing about \$1 million. These numbers do not consider the value of the *service* provided by Wendover's roadway infrastructure, nor do they consider maintenance costs. The numbers also do not consider the value of Wendover's accessibility to I-80.

As of 2000, the Wendover Airport employed 44 persons, with a total annual payroll of \$1.169 million, and a total annual output (gross sales and capital expenditures of airport-related businesses) of \$3.293 million (Wilbur Smith, no date). Each airline passenger, by spending money on lodging, food, gambling, and other consumables, contributes to the area's revenue. Five passenger flights per day, with an average load of 80%, were occurring as of February 2005 (anonymous 2005). At a rate of 25,000 travelers per year, and average spending of \$200 per two-day stay, the annual revenue generated may be about \$5 million. Although the revenue potential of the airport is clear, the costs of operation, which include labor, maintenance, snow removal, lighting, emergency services, and others, are high. For example, a charter flight program during the mid-1990s was running \$13 million per year; the high costs were partially responsible for the bankruptcy declarations of two West Wendover casinos in 2002, and the discontinuation of air services ("Wendover Airport," 2005).

For simplification, it was assumed that the value of the airport is embedded in its fixed infrastructure. The following unit costs were assumed (U.S. \$2003; composite values, multiple sources):

•	Runway (30-m width, including lighting)	\$3,280,000/1,000 m
•	High-intensity beacon	\$25,000
•	Communications and instrumentation	~\$1,000,000
•	Hangar	\$55,000
•	Fueling tanks and facilities	\$95,000
•	Passenger building and facilities	\$250,000
•	Other buildings	\$100,000
•	Other facilities and equipment	\$50,000

Based on these figures, the Wendover Airport infrastructure is worth about \$18 million, about 90% of which is invested in two 2,438-m (8,000-ft) runways, taxiways and lighting. Tooele County's reluctance to simply "hand over" the airport to West Wendover and Nevada is understandable given its value. As of September 2005, a proposal to sell the airport to West Wendover for \$1.8 million, covering a portion of its debt but about 10% of its capital value, was being considered ("West Wendover," 2006).

The combined capital value of Wendover's transportation assets is estimated to be \$40.6 million. What entity would bear the loss of this asset valuation as a result of Wendover's annexation? None, although Tooele County would, perhaps, be the biggest "loser," since the county's transportation funds are based, in part, on Wendover's street mileage. The county's B&C road funds during the fourth quarter of fiscal year (FY) 2005 were allocated by the State based on 5,137.84 weighted miles (8,268.57 km) of road, of which 57.00 were in Wendover. (B&C road funds are distributed by the State for the purpose of county and municipal road improvements) (UDOT, 2005) The annexation would result in a loss of a little more than 1% of these funds.

4.4 Transportation Funding

The extent to which transportation funding would change under the proposed annexation was studied. The three primary sources of revenue in Wendover are sales and use, personal income, and property taxes. The Utah Foundation (2004) reported that 82% of the State's tax revenue was generated by these three sources in 2003. Other receipts were obtained from motor fuel, motor vehicle licensing, corporate franchise, and other taxes. All of these are general revenue sources of which portions are collected from and spent on transportation. Other transportation-related funding sources include the aforementioned State B&C program, the Federal Highway Administration (for roads on the Federal-Aid System), and various State and federal funds, from various programs, administered by the WFRC.

The prediction of future municipal revenues can be a demanding exercise, although research has led to suggested methods (e.g., Cirincione, Gurrieri, and Van de Sande, 1999). For this paper, forecasts were not made, but past and current funding were examined. Local sales and use taxes in Wendover generated \$147,759 in FY 2004, having increased at an annual rate of 3.0% since FY 1993 (UTSC, 2004a). Thus, Wendover's FY 2003 revenues were about \$392,400, based on a 37% contribution of sales and use tax receipts ("Utah's tax burden," 2005).

Tax rates in West Wendover were generally higher than those in Wendover as of FY 2005, partially to compensate for Nevada's lack of an income tax. The cigarette tax, for example, was 80 cents/package in Nevada, versus 69.5 cents in Utah; the State sales tax was 6.5% in Nevada, versus 4.75% in Utah. The higher liquor taxes in Utah, described earlier, were a counterexample. The total FY 2004 tax revenues estimated for West Wendover were \$1,339,025, about 3.4 times those of Wendover (Nevada DOT, 2004). Tax revenues generated on the Wendover "side" would increase by about 25% because of the higher tax rates, ceteris paribus. The municipal tax revenue, then, would be about \$1.83 million. The total revenue *per km of road* would increase from \$22,800 (in Wendover) to \$43,300 (in the "enlarged" Wendover). The greater amount of revenue would benefit

Wendover's street maintenance, although the increased funding would be inadequate for the current \$1 million street repair need.

4.5 Personal Transportation Costs of Wendover Residents

If the residents of Wendover became Nevada citizens, one benefit would be their relief from State income taxes. Several personal transportation costs would increase, however. The Committee on Annexation (2002) reported that the average annual automobile insurance premium would increase from \$526 to \$900. The average annual driver's license and registration fee would increase from \$184 to \$272. As of August 2005, Nevada's gasoline tax, at 24 cents/gal, was lower than Utah's 24.5 cents/gal tax (UTSC, 2004b), but Nevada was levying an additional 10.3 cents/gal excise tax. Wendover residents, therefore, would pay about 40% more in gasoline taxes. A total of 577 motor vehicles were owned by Wendover's 414 households in 2000. The average annual net *increase* in licensing, registration and insurance costs *per household* would be about \$644. Also, presuming that each vehicle is driven an average of 19,300 km per year, with an average fuel efficiency of 32.2 km/gal, then each household would pay an additional \$82 in fuel costs per year.

Automobile insurance premiums have tended to increase each year; one source reported a 7.2 to 11.9% annual increase in insurance rates nationwide between 2000 and 2003 ("InsWeb auto insurance index"). Although Utah's gasoline tax was increased by 5 cents per gal during the late 1990s and Nevada's was raised by 1 cent in 2003, it was assumed that there would be no change in these rates before 2015. Assuming annual population, households and vehicle ownership growth rates of 2.0% in Wendover between 2007 and 2015, steady registration fees and gasoline taxes, and 9.5% annual growth in automobile insurance premiums, then the additional transportation cost per Wendover household would be about \$725 initially, increasing to \$1,786 by 2015. These estimates assume no changes in vehicle ownership rates, household sizes, fuel efficiencies or annual mileage accumulations. The increase in personal transportation costs would primarily be attributable to higher automobile insurance rates.

5.0 Alternatives to Annexation

5.1 Airport Expansion and Promotion

For Wendover to become less dependent on annexation, it may be useful to increase the general public's and officials' awareness of the value of the City's infrastructure. Also, while waiting out the lengthy and uncertain annexation process, it may be worthwhile to examine ways in which Wendover's economy can be boosted. The City's greatest economic asset, the airport, could be instrumental in reviving Wendover. One vision would be the continuation and expansion of chartered air flights funded by the casinos, combined with the upgrading and promotion of Wendover Airport's historical facilities. As of 2002 there were 360 aviation museums in the U.S. ("Aviation museums"). Many of these operate as non-profit organizations, with income from local government agencies, private support, and nominal admission fees (Purrier, 2004). One benchmark, based on a 2005 survey, was that 14% of visitors to Las Vegas did not gamble ("Las Vegas visitor statistics"). It is possible, then that the museum, along with other historical attractions, could draw some visitation. While the high costs

of aviation museum operation and maintenance inhibit profits, visitor spending in a museum's environs can benefit a local economy. The Wendover Airport would probably need to procure several vintage aircraft to enhance the museum's appeal. Linkages to nearby attractions such as Danger Cave, where prehistoric artifacts have been found, Jukebox Cave, where airmen relaxed during World War II, and the Bonneville Salt Flats, where numerous land speed records have been set, all in Utah and within 20 km, would enhance Wendover's draw on tourists.

5.2 Consolidation and Joint Ownership

One alternative to annexation would be a joint ownership arrangement between Utah and Nevada, in which Wendover and West Wendover are consolidated under a dual government. Such an arrangement exists in Lloydminster, a city of about 22,000 that is jointly owned by Alberta and Saskatchewan, in Canada. Bhargava (2001) reported that the two provinces were dissimilar in their political orientations, and taxation, health insurance and automobile insurance policies. Although the cities amalgamated in 1930, the social, political and economic structures of the two have continued to evolve. For example, residents have shifted from Saskatchewan to Alberta over time in response to the latter's lower income tax (despite the higher health care premiums). Although it is inconsistent, coordination exists, such as the sharing of school curricula and time zones. Lloydminster has thrived, primarily because of a local industry (petroleum) that has been equitable in its impacts on the city. To make joint ownership work in Wendover-West Wendover, a common economic ground with legalized gambling in Wendover would need to be considered. Similar proposals have been thwarted in the past, though, with the latest being a 1992 referendum by the horse racing industry to legalize pari-mutuel betting in Utah (Davidson, 2005).

6.0 Conclusion

The economic disparity between Wendover and West Wendover presents a compelling case for consolidation of the two cities. The estimated \$40.6 million value of Wendover's transportation assets, however, suggests that simply "handing" the city to Nevada and West Wendover be reconsidered. The Wendover Airport, with an estimated \$18 million in fixed assets, is a critical player in the proposed merger. Debts associated with airport improvements had surged from \$3.4 million, when annexation talks began in 2001, to \$27 million by early 2006, forcing West Wendover to reassess its growth financing. Although the airport debt appeared to exceed its capital value, the airport is an untapped revenue source, with the 2005 return of chartered air flights, and the potential for capturing some tourist dollars otherwise destined for West Wendover's casinos. The attraction of new visitors to Wendover's aviation museum is possible through a more aggressive promotion and display of the airport's history. The annual Wendover Air Show, held at the airport, attracted 5,000 visitors in 2005, and has been one of the few boons to an otherwise depressed Wendover economy. The event exemplifies the magnetic potential of the airport. The legalization of gambling in Wendover may be the most direct way to boost the city's economy, and suppress the urgent need for annexation. It is evident, however, that transportation-related strategies could have a significant impact on Wendover's economy, and on the conditions of the merger. In view of a Nevadan reluctance to cover the debts,

community leaders in Tooele County and Wendover were, perhaps, starting to reevaluate the role of the Wendover Airport.

7.0 Acknowledgement

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