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The Viability and Necessity of DesertXpress and the Future of Las Vegas

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DesertXpress and the Future of Las Vegas

by

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Introduction

Las Vegas and Nevada as a whole have been hurt by the recession just as the rest of the nation. There have been many attempts to revive the once thriving economy but to no avail. Many factors have hindered the nation's economy as a whole; but political factors have also played a part in lessening Las Vegas's ability to regain its economic status. A major factor involved the fact that the MagLev was not far enough into the process to receive funding. However, the MagLev is a high speed rail system that operates by magnetic levitation rather than mechanical means (Bonser, 2011). Between January of 2007 and December of 2008, the unemployment rate climbed from 4.2% to 9.3%. In August of 2011, the employment rate was 13.4% but had been as high as 14.6 % earlier in the year (United States Department of Labor, 2011).

As Las Vegas is surviving just as other major metropolitan areas are in Nevada, there must be new and innovative ways to increase tourism in an effort to revive the economy. There have been multiple proposals to create a high speed rail line between Southern Nevada and Southern California. One of the latest proposals was a high speed magnetic levitation train called the MagLev, but failed to receive funding from an $8 billion stimulus package which was provided by the U.S. Government. This $8 billion stimulus package was to provide funding for a national rail system. Eighty-three million dollars of the total funding had been proposed for Maglev (Hilkevitch, 2009). The administration stated that the MagLev project was not far enough along to be eligible for the stimulus package, hence the political factor spoken of previously (Tetreault, 2010A).

The MagLev rail line was to connect Las Vegas, NV and Anaheim, CA. Anaheim is 264 miles from Las Vegas, NV. However, DesertXpress has continued its trek and will begin

constructing a rail line that will connect Las Vegas, NV and Victorville, CA. Victorville, CA is approximately188 miles from Las Vegas, NV and the train will help in many ways such as reducing road congestion, auto fatalities, and improve public safety. One must keep in mind that DesertXpress is not necessarily the replacement for MagLev as the distance is much shorter. Exploratory research that has been conducted reveals the benefits and possible drawbacks of this high speed rail. The subjects covered included revenue and job growth, environmental impact, public safety, homeland security, and the big picture which is that this high speed rail is a template for other future projects. This paper was created with secondary data sources.

Purpose

The purpose of this professional paper is to determine the effects of the DesertXpress, an interstate high-speed rail which will connect Las Vegas, NV and Southern California and will provide critical information as to the viability and economic strength that the high-speed rail will bring to the region.

Statement of objective

This paper will offer readers the opportunity to view information that will allow them to understand the importance of new and innovative technology such as the DesertXpress to the hospitality industry, and to the economic well-being of the U.S. This paper also reflects the past, current, and potential future of the economic status of California, Nevada, and specifically Las Vegas. The final objective of the paper is to serve as a "heads-up" for all hospitality industry professionals in that they can prepare for what is coming, serve as a consultant's report to the viability of the rail line, and will be a reference for possible future projects as the outcome of the research benefits the hospitality industry as a whole.

Justification

There is no doubt that the United States and specifically Las Vegas is still struggling with the effects of the recession although double-dip recession is unlikely (Wail & Shearer, 2011). The fact that most of Las Vegas has survived with the exception of two casino-hotels, which were the Sahara and the Fountanbleau is a feat within itself. One major resort opened during the worst part of the recession and there have been three major renovations of major hotels. However, there will come a day when the economy will recover and there will be projects such as the DesertXpress which will help budge that process along. Given this, the justification of the paper is to provide information and research for industry professionals so that they may be prepared. By knowing what the effects of the DesertXpress will be, they will be able to determine future marketing projects, expansions, or renovations of present space. It will also assist in planning for future staffing. This paper will give them the advantage of better preparing for the future which is the revitalization of Las Vegas.

Part 2

Literature Review

This literature review was created to give the necessary background information, pertinent data, and explanations of the various aspects concerning the DesertXpress high speed rail line. The result of reading this information will give the reader the opportunity to deduce whether the DesertXpress is a necessity.

Effects of Public/Mass Transportation

Public/mass transportation is extremely important to the environment and the economic recovery of our nation from the long-term recession we entered in 2007 (American Public Transportation Association, 2011). Specifically, high speed rail lines are at the forefront of interstate travel. There are many benefits to this high speed rail system, but there is an environmental impact which will affect numerous areas such as the Mojave National Preserve (Packer, 2011). The purpose of mass transportation is basically a transportation mode in which large numbers of commuters can be moved from one location to another. The focus of this paper is high speed rail which is fast, comfortable, and reliable. High speed rail or (HSR) is a type of passenger rail transport that generally operates between 200 km/h (125 mph) to 250 km/h (155 mph.) However, what is considered the actual maximum commercial speed is 300 km/h (186 mph) for the majority of national high speed railways (Japan, China, France, Germany, Spain, Italy and the UK) (James, 2011).

Environmental Impact

The environmental impact is a major factor considered when proposing such a system as it can be very detrimental to the environment. Specifically, the environmental impact of the DesertXpress focuses on Southern California and Southern Nevada. The areas of interest include

but are not limited to the Mojave National Preserve. Animals are affected. The animal that is directly affected is the desert tortoise and its designated critical habitat. This is of course because the rail line will be constructed through the tortoise's habitat. Plants are also affected. The plants that could potentially be affected include the Bell's Vireo plant (*Vireo bellii pusillus)* and the Southwestern Willow Flycatcher (*Empidonax trailii extimus)* which are both federally endangered species. The proposed area for the power lines cross the riparian habitat associated with the river in which the two types of plant thrive (Federal Railroad Administration, 2011A). Environmental studies will most certainly determine other affects.

Benefits

The benefits of mass transportation are numerous. Six major benefits are discussed below. The first benefit is personal opportunity enhancement which provides personal mobility and a greater freedom for everyone. This personal mobility includes options to get to work, go to school, visit friends, or go to the doctor's office. It also provides greater access to job opportunities for millions of Americans. The second benefit is that is saves fuel and reduces traffic congestion. Americans living in areas served by public transportation save 785 million hours in travel time and 640 million gallons of fuel per year in congestion reduction alone. Lastly, there would be an additional $19 billion in cost caused by congestion without mass transportation. A third benefit is that it provides economic opportunities. For every single dollar that is invested into public transportation, four dollars in economic returns is generated. For every $1 billion invested, 36,000 jobs are created. Every $10 billion in capital investment in public transportation yields $30 million in increased business sales. Finally, every $10 million in operating investment yields $32 million in increased business sales. The ripple effect of this revenue is vital to the revitalization of the economy (APTA, p. 1 -6, 2011)

A fourth benefit is that public transportation saves money. Eighteen cents of every dollar is spent on transportation of which 94% goes toward purchasing, maintaining, and operating cars. This is the largest expenditure after housing. In addition, public transportation provides a safe and affordable alternative to driving. Lastly, households that are likely to utilize public transportation can potentially save approximately $10,000 per year. The fifth benefit is that public transportation reduces gasoline consumption. Overall, public transportation saves the United States 4.2 billion gallons of gasoline annually which is more than 3 times the amount of gasoline imported from Kuwait. 4400 fewer miles are driven by households near public transits than those with no access to public transit. This is the equivalent to and individual household reduction of 223 gallons per year. The sixth and final benefit of public transportation is the reduction of the carbon footprint. Communities that invest in public transportation reduce the nation's carbon emissions by approximately thirty-seven million metric tons annually. As an individual, he/she can reduce daily carbon emissions by twenty pounds or forty-eight hundred pounds per year. Lastly, taking public transportation can be 10 times greater in reducing harmful greenhouse gases (APTA, 2011, p. 7-9).

Public Safety

In 2010, Americans took 10.2 billion trips on public transportation (American Public Transportation Association, 2011). By decreasing the amount of automobiles on the interstate, multiple benefits will present themselves. Current data below has been given to show the number of visitors to Las Vegas from Southern California and the potential number of travelers on the DesertXpress which will reflect the decrease in automobiles traveling on I-15.

With any major transportation project, public safety is always a concern. The DesertXpress high speed rail project will drastically change the number of automobiles on the

interstate between Southern California and Southern Nevada. The ripple effect of this will include a lower number of traffic fatalities, lost time on account of congestion, improved roadways, and easier construction progress as congestion on the I-15 shown in Figure 1.

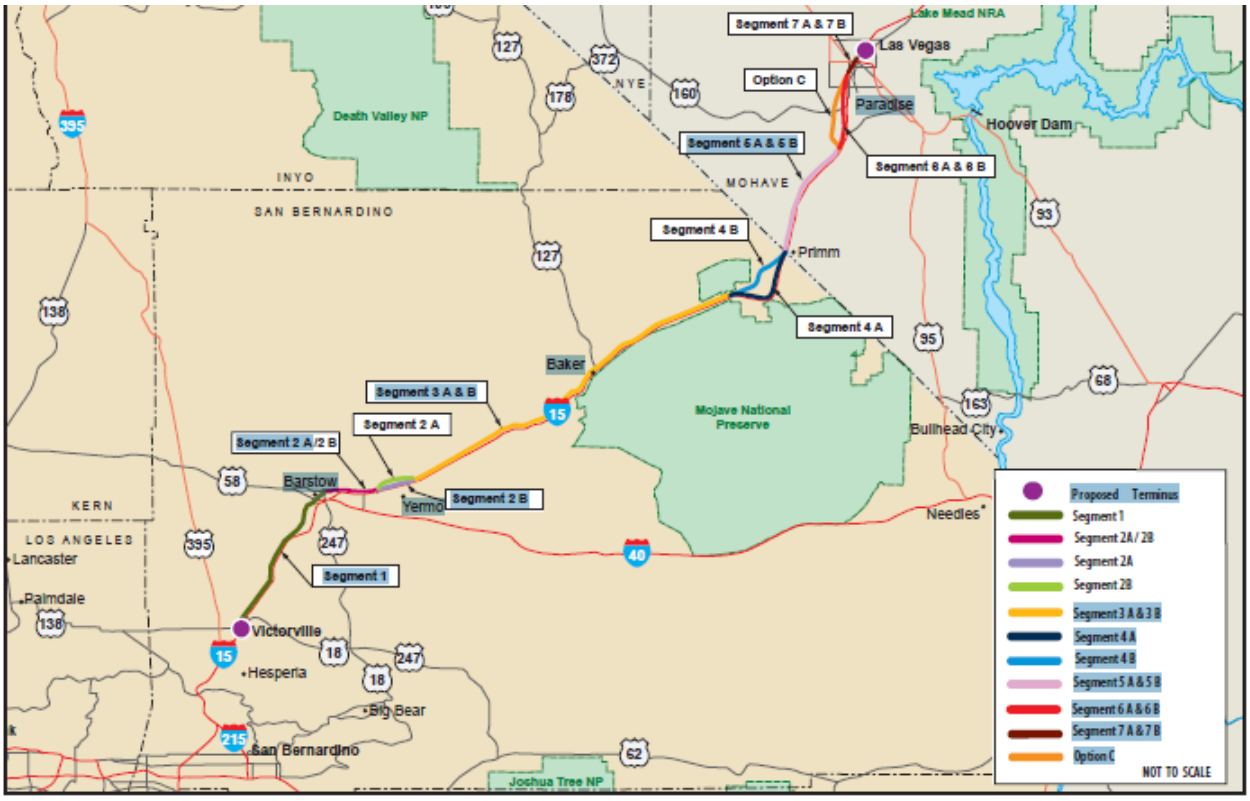

Figure 1: Federal Railroad Administration, 2009

Forty-eight percent of visitors to Las Vegas 2010 drove their own automobiles. Twenty-six percent of visitors to Las Vegas in 2010 were from Southern California. (GLS Research, 2010) The current potential paid-forecast of ridership per year is 6,490,000 which is 40% of traffic on the California border. This estimate is seen by some as unrealistic. (NewberryInfo, 2011) Nevertheless, any reduction of congestion is positive. DesertXpress claims that the HRS would carry 1,350 passengers during a typical peak hour in the first full year of operation and peak hour capacity could reach 5,000 (United States Department of Transportation 2011A). This will most certainly reduce the travelers to Las Vegas by automobile. Lastly, there are a number

of auto accidents on I-15 which are caused by reckless driver and congestion in which one or both causes rear-end collisions. The fatal accident rate within a portion of the I-15 in-between Barstow and the Nevada State Line exceeded statewide averages between 2003 and 2005. In addition, nearly 50% of traffic accidents between the Nevada State line and Spring Mountain road were in fact rear end collisions (Federal Railroad Adminstration, 2011B). By reducing the number of autos on the road between these two points, the interstate will be much safer.

Revenue

Three main sources of revenue that will be created in Victorville and Las Vegas will be from an increase in fuel sales as the car rentals in Las Vegas will increase, the number of elderly or otherwise unable individuals visiting will increase as the drive time and distance has been shortened, and groups will now be able to travel together while working together in preparation for conventions and such. DesertXpress will capture 22% of the Southern California market (Cambridge Systematics, Inc., 2008).

Job Growth

As of August, the current unemployment rate in Las Vegas was 14.2%. (United States Department of Labor, 2011) With the addition of the DesertXpress, jobs will be created from the construction of the rail line itself, and will also cause an increase of staffing in Las Vegas hotels, car rental staff, and will potentially create the need for expansions of resorts. These expansions put people to work. Another positive fact is that there will be an increase in the length of time guests will stay to visit. Rather than turning in rather early so that they can prepare for the long drive, they can continue to enjoy the Las Vegas “moments” until time to depart to the rail station. Job growth is yet another positive aspect of the DesertXpress implementation. This job growth will be the result of an increase in tourism. This increase in tourism will have a positive ripple

effect that Las Vegas has so badly needed. (An estimate of the potential unemployment drop % will be discussed here.)

Safety

With any transportation mode of this size, safety is always a first thought. Studies have been completed to assist in codes and regulations that will help ensure the safety of the passengers (DesertXpress, 2011).

Right of Way

The DesertXpress creation and construction will be implemented with the Caltrans and NDOT highway rights of way. These regulations include but are not limited to such elements as: highway design standards, barriers, emergency access, and maintenance of traffic. This plan will help eliminate:

- Vandalism;
- Launching of objects from overhead bridges or structures into the path of trains; and
- Intrusion of vehicles from adjacent rights-of-way (DesertXpress, 2011, p.1, sec 1.2)

Funding

The DesertXpress is both a publicly and privately funded project. The company had stated that the project could be funded solely by private investors, but as of February of 2011, DesertXpress had announced that they are seeking four and a half billion dollars in federal loans (Velotta, 2011).

Public Opinion

There is much debate on the viability, safety, and overall need for the DesertXpress. The following section is feedback from community sources. A larger question is whether Washington is ready to handle the rollout of high speed rails. It is understood that the administration's plan of a twenty-five year master project puts them into uncharted territory (Demirjian, 2011). There are many entities however, that are against the DesertXpress project. As an example, the city of Barstow has explained their belief that they will lose revenue because of the high-speed rail system will bypass their city (CruickShank, 2011). In addition, a Southern Nevada neighborhood association created an extensive 12 page packet expressing their concerns about the negative effects of the DesertXpress project (Velotta, 2011)

Comparison Studies

Western High-Speed Rail Alliance

According to the Utah Foundation, very interesting information has been brought to light. High-speed rail (HSR) has increasingly become an extremely important mode of transportation over the last ten years. A study by the Western High-Speed Rail Alliance was conducted to determine the feasibility of implementing a high-speed rail in the regional area of Southern, CA and Las Vegas, NV. This alliance consisted of conglomerate of Metropolitan Planning Organizations from the states of Colorado, Utah, Nevada and Arizona. Important findings were the commonalities of such high-speed rail systems and the environments in which they exist. Characteristics include the fact that many countries of the world with high-speed rail systems are economically well-developed, densely populated and geographically small. The second characteristic is that most countries that have implemented high-speed rail systems also have governments that are relatively centralized and have cultures that are considered more collectivistic compared to the United States. Lastly, the United States would certainly require

one of two arrangements in order to successfully implement a high-speed rail. The first would be a federally-funded, owned and operated high-speed rail network. The second would be the regional coalitions of state governments that would not only collectively fund, but would own and operate the high-speed rail on a regional basis. This could possibly include some federal funding (Utah Foundation, 2011).

Figure 2 is a table consisting of high-speed rail infrastructure by country.

Figure 2: High-Speed Rail Infrastructure by Country

Country	Lines in Operation (km)	Lines under Construction (km)	Lines Planned (km)	Total Lines (km)	Fastest Scheduled Train(s) (km/h)	Avg. Speed of Fastest Scheduled Train (km/h)	Test Run Speed Record (km/h)
Belgium	209	0	0	209	300	237	347
China	3,529	6,696	2,901	13,126	431 (mag.); 350	313	502 (mag.); 394 (conv.)
France	1,872	234	2,616	4,722	320	272	574
Germany	1,285	378	670	2,333	300	226	550 (mag.); 406 (conv.)
Italy	923	0	395	1,318	300	178	368
Japan	2,452	590	583	3,625	300	256	581 (mag.); 443 (conv.)
Netherlands	120	0	0	120	300	<140	336
South Korea	330	82	0	412	300	200	355
Spain	1,604	2,219	1,702	5,525	300	236	404
Switzerland	35	72	0	107	250	<140	280
Taiwan	345	0	0	345	300	245	315
Turkey	235	510	1,679	2,424	250	<140	303
U.K	113	0	0	113	300	219	335
U.S.	362	0	900	1,262	240	161	296 (jet); 264 (conv.)

Source: International Union of Railways (UIC): High Speed Lines in the World. Accessed at: http://uic.asso.fr/spip.php?article573
High Speed Rail by Country. Accessed at: http://en.wikipedia.org/wiki/High-speed_rail_by_country

Figure 2: High-Speed Infrastructure by Country

Source: International Union of Railways (UIC): High Speed Lines in the World. Accessed at: http://uic.asso.fr/spip.php?article573
High Speed Rail by Country. Accessed at: http://en.wikipedia.org/wiki/High-speed_rail_by_country

Also, Figure 3 consists of the geographic and demographics of countries with HSR.

Figure 4: Geographic and Demographic Characteristics of Countries with HSR

Country	Land Area (sq km)	Population	Population Density Per sq km	Urban Population
Belgium	30,278	10,414,336	343.96	97%
China	9,569,901	1,338,612,968	139.88	43%
E.U.	4,324,782	491,582,852	113.67	NA
France	549,970	62,150,775	113.01	77%
Germany	348,672	82,329,758	236.12	74%
Italy	294,140	58,126,212	197.61	68%
Japan	364,485	127,078,679	348.65	66%
Netherlands	33,893	16,715,999	493.20	82%
South Korea	96,920	48,508,972	500.51	81%
Spain	498,980	40,525,002	81.22	77%
Switzerland	39,997	7,604,467	190.13	73%
Taiwan	32,260	22,974,347	712.16	NA
Turkey	769,632	76,805,524	99.80	69%
U.K.	241,930	61,113,205	252.61	90%
U.S.	9,161,966	307,212,123	33.53	82%

Source: CIA World Factbook.

Figure 3: Geographic and Demographic Characteristics of Countries with HSR

Source: CIA World Factbook.

Maglev vs. DesertXpress

There are multiple ways to form a decision concerning which high-speed rail would be more suitable for the region and the Country. One fact that must be made clear is that statements made by individuals concerning these two HSR's are not always true and their question can sometimes be vague at best. An example of this is a statement by Mark Fierro that a recent survey showed that 81% of *those* polled would ride the Maglev to Anaheim and only 7% of *those* polled would ride the DesertXpress to Victorville. (Fierro, 2010). First of all, he does not state how recent the poll occurred. Secondly, could he have been asking those who are only interested in traveling between Anaheim, CA and Las Vegas, NV? Still, the question remains: Is the DesertXpress a better choice than the Maglev? Neither choice is perfect. One gives the rider a stunning view of the future traveling at three-hundred miles per hour by magnetic levitation, and the other travels at half the speed on traditional steel tracks (Mascaro, 2009). This is of

course relevant if one had to choose between the two. However, for the purposes of this paper, the research is to answer the question of what the DesertXpress will do for the regional and national economy.

Conclusion

The sources utilized in Part 2 of this paper clearly present necessary and pertinent information to assist the reader in better reaching an informed decision. It is now possible to eliminate simple speculation, emotion, and worst-case scenarios in regards to the implementation and existence of the DesertXpress.

Part 3

Introduction

The information thus far has provided a foundation of understanding concerning the specific facts of high-speed rail as well as the argument of the viability and necessity of the DesertXpress. This part of the paper addresses the strengths and weaknesses of the information in order to determine the results as favorable or non-favorable. In addition, each section is followed up with a conclusion that suggests whether the information is in favor or not in favor of the DesertXpress.

Results

DesertXpress will be the first true, dedicated, passenger-only high speed rail within the United States (Stone, 2011). The remaining portion of this paper presents information concerning the viability of this private initiative.

Facts Overview

The facts covered thus far begin with the current state of the economy within Las Vegas and the need for a financial tool to assist in recovery in addition to the facts include the viability of the DesertXpress, and an explanation of what public/mass transportation is and what it means to the consumer. Within this explanation were statistics and benefits which are pertinent to proving the case in favor of public/mass transportation.

Need and Necessity

The need for the DesertXpress is very strong in multiple ways. On the surface, the high-speed rail will create jobs to construct the rail-line and the DesertXpress itself will employ people in such areas as ticketing and hospitality. Concerning long-term growth, jobs will be created in Southern Nevada and Las Vegas resulting from an increase in tourism. The rails will

lead to higher levels of public safety through reduced highway congestion (Interstate 15), fatalities from automobile accidents decline, and highway maintenance required because of the heavy traffic. Maintenance also becomes more palatable.

Harm

There are multiple subjects of concern regarding ill effects of the implementation of the DesertXpress. The overview of this includes but is not limited to:

- Loss of revenue in some cities;
- Displacement of certain species in wildlife;
- Environmental changes to the landscape believed to be permanently detrimental

Harm caused by this high-speed rail is relative to the ideas of those discussing the matter. Some environmentalists feel that the environment itself is more important to human life and the advancement thereof. Although plants and animals will be disturbed not destroyed and displaced rather than removed, the need for the high-speed rail is not permanently detrimental to the surrounding environment. Also, the cities that may potentially lose revenue because the high-speed rail may not have taken into account a replenished supply of people who may choose to drive as congestion has been relieved. Aside from these few areas, there are no others known at this time.

Environmental Impact

The environmental impact of the DesertXpress manageable; however there are some that believe that there is a permanent detrimental impact. There are many environmentalists that are caught in the "catch 22" of their own beliefs. What is meant by this is that they disagree with the continued use of fossil fuels, yet they also disagree with utilizing open land that will displace wildlife. Examples of the wildlife that will be displaced are the Joshua tree and the desert

tortoise (Cruickshank, R. 2011, April 3). The level of protection is a major concern and is discussed further in this section.

Protection

The DesertXpress will be construction alongside Interstate 15. This in itself is a positive in that the high-speed rail will be constructed in an area not unknown to noise and traffic. In fact, with the implementation of the high-speed rail, traffic will be dramatically reduced, therefore removing a large portion of noise pollution. Plant and animal life has already adapted to the interstate already. In addition to this, steps are being taken to protect the Desert Tortoise and native plants.

Public Opinion

Public opinion varies with each group, each discussion, and each background concerning the DesertXpress. However, the majority of the public is in fact in favor of the DesertXpress. According to Begley (2011), Barstow and Baker are strongly opposed as the high-speed rail will bypass their cities and could potentially eliminate 20% of the forty-five thousand vehicles that stop for gas and/or food in their cities," (Blow to business section, para.1).

Political Influence

There have been many proposals for high-speed rail in Southern California as well as the entire country. As mentioned before, the Maglev was well on its way to being the choice of HSR in this region. There is much speculation that the Obama administration was solely responsible for the non-release of funding for the Maglev Project (Tetreault, 2010B)

Constraints

Constraints are primarily externally imposed. Information must be 2nd party as time constraints made it impossible to gather first hand research. Factors will change on this project as it moves

forward over the course of the construction. Furthermore, as factors change over the course of construction of DesertXpress, this information will not necessarily apply in the same manner and will have to be updated.

Conclusion

Setting aside speculation and emotion, understanding the statistics concerning all aspects of the benefits of a high-speed rail in this economy is imperative. The numbers do not lie, and a clear indication of those benefits has been shown thus far in the paper. The validity of the DesertXpress is that revenue, job-growth, and public safety are all enhanced. The potential harm that could occur is not permanent and can is manageable. Attention must also be given to the fact that doing nothing will certainly bring no progress.

Recommendations

During research on this paper it became clear that there is a plethora of information that could be more easily disseminated in order for the general public to better understand the facts. Given this, the first recommendation is that this paper be published in its entirety so that the information is absorbed from one reading. This will allow the reader to hold more informed opinions based on whole of the project rather than bits and pieces. The second recommendation is that DesertXpress address the public directly through television and radio ads explaining what *will* be done by the company. Their approach to date seems to be to coast on speculation and hope for the best. Thirdly, environmentalists pose a threat. It might be wise to address this head-on by inviting environmentalist groups to informational sessions that will help them to better understand the company's goodwill in addressing, implementing, and enforcing the guidelines to protect wildlife. This action will also allow DesertXpress to learn more about issues environmentalists might raise. Finally, making an official S.W.O.T. analysis public would

also be of great assistance as the general public can view important facts that affect their opinion and decision.

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