

DOUGLAS, ARIZONA: CHARACTERIZATION AND POSSIBILITIES/PROBLEMS FOR ECONOMIC DEVELOPMENT OF THE PORT OF ENTRY

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Douglas, Arizona: Characterization and Possibilities/Problems for Economic Development of the Port of Entry

Executive Summary

As Douglas continues to pursue various economic development strategies, including port of entry development, it is necessary both to collect extensive information about the port of entry and the city and to identify both information and infrastructure gaps to guide further study and port development objectives. This report addresses several aspects of economic development in Douglas, Arizona, including: the status of the economy of Douglas, Arizona using an economic base study and a note on the economy of Douglas's sister city in Mexico, Agua Prieta; some trade flows through the Douglas region, as well as the nature of Douglas's transportation and telecommunications infrastructure, both identified by Erie (1999) as important to any development strategy; and a comparison of the structure, goals, and services of port authorities and economic development organizations to develop some practices that the Douglas Port Authority could pursue. Extensive comparisons with the two other major commercial ports in Arizona, Nogales and San Luis-Yuma, are made to better understand Douglas's economic condition.

Major Findings & Identification of Information and Infrastructure Gaps:

Major Findings

1. The Douglas economy relies heavily on federal and local government employment – approximately 2795 out of 5694 jobs in the area are provided by government agencies, including the Arizona State Prison, Customs and Border Protection, the Douglas Unified School District, and the City of Douglas. In nearly every other sector, Douglas remains underdeveloped.
2. In sectors important to port growth (including transportation and warehousing, accommodation and food service, retail trade, wholesale trade, and manufacturing) Douglas's employment numbers were significantly less than Nogales but on par with Yuma and San Luis, which were both heavily agriculture-based. See page 15 for a comparison of location quotients.
3. Agua Prieta, Sonora, located adjacent to Douglas, was on par with Yuma-San Luis in export-oriented sectors relevant to port growth and economic development, including

wholesale and retail trade, lodging and food services, and manufacturing. Agua Prieta lagged behind both Yuma-San Luis and Nogales in its construction sector. Nogales had greater employment than Agua Prieta in all sectors identified by INEGI's Censos Economico 2004.

4. Current trade flows are highly regional. Most exports originate in Arizona (76% in 2007) and terminate in Sonora (87% in 2007). About half of all imports end up in Arizona. The Douglas Department of Economic Development intends to market the port in Chihuahua and Coahuila (according to the Action Plan 2007-2008), though export trade with those Mexican states is low (0.8% and 3% in 2007 respectively). No data on the origin of imports in Mexico was available.
5. For 2006 and 2007, imports into the United States through the Douglas Port of Entry were heavily natural-resource based. Approximately 41% of the 2006 import trade and 52% of the 2007 import trade relied on refined copper wire, molybdenum ores, gold bullion, silver bullion, and copper cathodes. It is unknown what effect recent jumps in copper prices have had on import/export trade.
6. Exports to Mexico are largely manufactured products or natural resources for use in the state of Sonora. One of the largest exports for both years was molybdenum ore, a byproduct of copper mining (#1 in 2006 and #2 in 2007). In 2007, refined copper was also a major export and ranked #3.
7. Douglas lags behind both Nogales and San Luis-Yuma in terms of both infrastructure capacity and expansion plans for the port. Both Nogales and Yuma have received funding this year for a General Services Administration port of entry redesign, while the Feasibility Study for Douglas (ASCG, Inc., 2008) was completed in January. Both cities also have active port authorities, resulting in development of industrial space in San Luis, the opening of a second port of entry in San Luis, and transportation development projects to improve the efficiency of Nogales's two ports of entry and to develop a highway from San Luis/Yuma to U.S. Interstate-10.
8. The Port of Douglas is entirely truck-based, with no air freight in either Douglas or Agua Prieta, despite two functioning airports in Douglas. Agua Prieta has a rail system, but it is seldom used for international trade. The proximity of Tucson (120 miles), Nogales (112 miles), and Phoenix (233 miles) make Douglas viable as a trucking port, based on

the assumption that trucking is less expensive within 500 miles of a port of entry (Erie, 1999).

9. In both a set of five interviews conducted with local businesspeople involved with the Douglas Port of Entry and a questionnaire distributed to local port users, the state of local highways in both Mexico and Arizona were identified as transportation infrastructure concerns; however, a brief comparison of the telecommunications infrastructure available found no appreciable difference between Douglas, Yuma-San Luis, and Nogales.
10. Out of a sample of 25 organizations, 10 organizations responded to the Douglas Port of Entry Development Questionnaire for a response rate of 40%. Two were small organizations (less than 100 employees), five were mid-size organizations (100-1000 employees), two were large organizations (greater than 1000 employees), and one did not answer the employment size question. Out of the sample, 70% replied that they would use a daily air freight flight out of Bisbee-Douglas International Airport or Douglas Municipal Airport.
11. According to the questionnaire, port users were satisfied for the most part with the current infrastructure of the port. However, port users unanimously identified improvement of wait times, the development of FAST or SENTRI lanes, and lobbying in Sonora as roles they want the Douglas International Port Authority to play. There was near consensus (from 8 out of 9 respondents) that the Port Authority should also pursue lobbying in the United States, Mexico, and Arizona, that it should pursue government funding for infrastructure and other improvements, and that it should improve road infrastructure in both Mexico and Cochise County.

Information Gaps

1. The economic impact of the port of entry on the local economy of Douglas and more broadly Cochise County has not been quantified. Nationwide, no publicly available studies on the economic impact of rural land ports of entry have been identified. An economic impact study may be useful for purposes of economic development and the acquisition of funding for port of entry and surrounding infrastructure development.
2. For marketing purposes, the origins of commodities and products going through the Douglas Port of Entry are poorly defined and subject to debate. A broad-based study to

identify key originating markets in Mexico and internationally as well as potential markets would be useful. However, collection of better information is necessary.

3. The physical infrastructure of the Douglas Port of Entry, as it now stands, can handle additional traffic, based on local sources. The General Services Administration, which administers the physical infrastructure of border ports of entry, has identified Douglas to undergo a port redesign during the next several years. Local port users and operators can take an active role in determining the course of the port redesign; however, specific objectives wanted by port users and operators have not been defined.
4. Based on the results of the questionnaire put out in Spring 2008, additional information about the concerns and wants of local port users is needed to better develop and design the Douglas International Port Authority to both retain old business and attract new business.

Infrastructure Gaps

1. Based on the economic base studies conducted, Douglas is underdeveloped in most sectors of its economy, specifically those that are export-oriented. For trade expansion at the port and economic development purposes, specific infrastructure needs for the city and the port must be identified; an example would be the incorporation of cold storage facilities for growth in produce imports and exports or the provision of value-added services by the Port Authority. Some examples of feasible value-added services could be further developed by gauging the attitudes of port users through surveys, town halls, open discussions, etc.
2. Based on the initial round of interviews conducted in February and the questionnaire results, transportation infrastructure gaps in both the city and county should be identified and addressed. Notably, the Greater Nogales – Santa Cruz County Port Authority has been successful in addressing local transportation needs. Plans are underway locally to expand local roads in anticipation of the Douglas port of Entry redesign.
3. Based on the needs of local port users, the development of FAST or SENTRI lanes, lobbying in the State of Sonora, and the improvement/maintenance of extremely short wait times, reported anecdotally to be less than one hour, should be investigated.

Strategic Objectives

1. Douglas, Arizona as it stands now should pursue avenues to develop and diversify its economy by 1) identifying sectors of potential economic growth, 2) creating plans to develop those identified sectors of economic growth, and 3) implementing necessary infrastructure improvements to attract new business and retain old business.

According to local sources, as well as the Action Plan provided by the City of Douglas Department of Economic Development (2008), sectors identified for expansion include call center/back office operations, warehouse/logistics, border security technologies, agro/biotechnology, food processing, retail, and tourism from retirees. To date, a call center that will employ several hundred people has relocated to Douglas, improving employment in the service sector. New businesses are attracted through prospect visits and trade shows.

2. Douglas, Arizona and its port of entry, ranked second among the three major ports of Arizona in terms of total trade value, has the potential for economic expansion under current conditions; however, it remains an under-represented highly regional port.

Therefore, one strategic objective of the nascent Douglas International Port Authority should be to develop several options to increase the amount of traffic through the port and more generally economic activity in the area. Options that could be considered include:

- 1) Possible cooperation with the ports in Nogales to develop Douglas as a reliever port during times of heavy traffic, which would require first approaching the Greater Nogales/Santa Cruz County Port Authority.
- 2) Development of a marketing plan to attract traffic from the interior of Mexico.
- 3) Continuing outreach to companies and development of prospects to relocate in Douglas/Agua Prieta.

1.0 Introduction

STUDY INITIATION

This study was initiated in September 2007, after representatives from ASU for Arizona, a community outreach program under the Office of Public Affairs at Arizona State University that designs projects in response to community request, met with City of Douglas Economic Development Director Victor Gonzalez to discuss current developments underway at the Port of Entry in Douglas, Arizona. Based on that meeting, this study is meant to act as a source of information for the developing Douglas International Port Authority and to identify knowledge gaps for future research concerning the Port of Entry. Ideally, addressing these knowledge gaps will improve the outlook for economic development in Douglas, Arizona, and surrounding areas.

STUDY PURPOSE AND PRODUCTS

In light of continuing port improvements, the City of Douglas Department of Economic Development finds it expedient to collect information on how to best develop the city and its port. This report is meant to serve as a preliminary document for the development of the port. It addresses the following questions, using information taken from both local sources and government databases, to further develop some strategic objectives as well as to identify information and infrastructure gaps.

1. What is the economic base for Douglas, and what part does the Douglas Port of Entry play in the economy?

- Because development is binational, how does Douglas's sister city, Agua Prieta, compare?

2. What is the character of the Douglas port of entry?

- Who does it serve?

- What moves through the port and where does it go?

- What transportation and telecommunications infrastructure is available for port users?

- What does a SWOT analysis identify as problems or opportunities for the port?

- What does a survey of Douglas Port users reveal about the port, and what do local stakeholders identify as the most pressing problems of the port?

3. What kinds of practices are being pursued by other Port Authorities, including both the Greater Yuma Port Authority and the Greater Nogales-Santa Cruz County Port Authority?

-Based on past practices, what are some suggestions for the Department of Economic Development and the Port Authority to improve the port on a local level?

Methodology:

1. Literature review of current reports on the Douglas area and comparison with reports on other ports in Arizona, especially Nogales.
2. Collection of import/export and trade flow data including point of origin from Douglas Customs & Border Protection, Seidman Research Institute at Arizona State University, various U.S. government agencies, and the Mexican Statistical Agency, INEGI.
3. Interview and survey data from local maquiladora (manufacturing) operators and major port users.
4. Visiting port authority/economic development organization websites and gathering information from library databases.

1.1. Douglas and Agua Prieta

City of Douglas, Arizona

Douglas, Arizona is a small community of approximately 17,016 people that lies on the Arizona-Sonora border adjacent to the much larger city of Agua Prieta (U.S. Census Bureau 2007). Douglas was incorporated as a city in 1905, mostly to take advantage of rich copper veins (Arizona Department of Economic Security 2006). Closure of the Phelps Dodge smelter in 1987 effectively ended the importance of copper mining to the area; as of post-2001, the major employer in the area is the government.

The population of Douglas is heavily Hispanic, with approximately 86% of the population identifying as Hispanic on the U.S. 2000 Census. In 2000, 79.8% of the population over five years old resides in homes where more than one language is spoken; 98.6% of whom spoke Spanish, and of Spanish speakers, 41.4% reported they spoke English less than very well. In total, about 32.6% of the total population in Douglas reported low levels of competency in the English language.

Compared to other regions of Arizona and the United States, Douglas has a high rate of unemployment and a low wage rate, which reflects both a less expensive standard of living and some economic stagnation in the area. Carreira et al. (2007) note that unemployment has gone down considerably since 2000, from 9.8% to about 6.8% in the first five months of 2007, according to the Arizona Department of Economic Security. The average hourly wage in 2007 was \$11.90 according to Carreira et al., compared to \$16.55 in Cochise County and \$17.41 in Arizona.

City of Agua Prieta, Sonora

Agua Prieta, Sonora is the Mexican sister city to Douglas, Arizona. Population estimates vary widely from an estimated 72,594 residents (according to INEGI 2005) to 110,000 residents (according to the Arizona Department of Commerce and the municipal government of Agua Prieta). Agua Prieta began as an important stopping point for Phelps Dodge mining operations located in Nacozari, Sonora, 123 kilometers south of Agua Prieta. Rail lines to the smelters in Douglas and the United States were heavily used until Phelps-Dodge moved out of the area (Gobierno Municipal de Agua Prieta 2008).

Currently, Agua Prieta serves as a center of industry for maquiladoras (manufacturing plants), twin plant operations (also known as IMMEX), and related support services, particularly since the North American Free Trade Agreement came into effect in 1994 (Anderson & Gerber, 2008).

The population has higher per capita incomes (with 60.9% of the working population earning the equivalent of 1-3 minimum wages, or \$4.23 to \$12.69 U.S. dollars per worker per day) when compared to Mexico as a whole (INEGI, 2004; Anderson & Gerber, 2008). However, economic stratification is high, and the unemployment rate was at about 20% in 2002 (Walker & Pavlakovich, 2002). Agua Prieta is well-served by its maquiladora (manufacturing) sector, which provided approximately 6,124 jobs in 2003, and 6,268 jobs for the latest year for which data is available (2006) (Banco Mexico 2006).

2.0. Economic Base Study for Douglas, Arizona, and Comparison with Agua Prieta, Sonora

To understand the Port of Douglas, it is necessary to first understand the city of Douglas and the most important sectors that comprise the economy, as well as how sectors related to the port of entry compare statewide, nationally, and with other cities in the region. Therefore, the

economic base studies conducted by Seidman Research Institute for years 2001 and 2004 for the City of Douglas have been updated. A smaller economic base study for the municipality of Agua Prieta, Sonora, was also developed for comparison to other major border cities with commercial ports in the region.

An economic base study was chosen to analyze the economy because no input-output model to estimate the impact of international trade on the local economy has been developed for Douglas. The Regional Port Impact Model (1982) has been used to measure port economic impact in the past. However, the methods involved are beyond the skill set and the time constraints of the researcher. Notably, location quotients do play a role in the regional port impact model. The IMPLAN Economic Assessment system is also used to measure impacts of trade on local economies; however, budget constraints did not allow for the use of this model.

2.1. Economic Base Study for Douglas, Arizona (Zip Codes 85607, 85608, 85626, 85655)

Due to the lag in data collection and publishing, 2005 data was used for employment estimations. While most of the information was taken from *Zip Code Business Patterns* provided by the U.S. Census Bureau, the *Douglas Perspective*, a yearly overview of the Douglas economy produced by Cochise College Center for Economic Research, was also employed.

According to Rex (2004), an economic base study describes an economy's structure and composition by sector; it acts as an effective method to evaluate the leading economic activities and whether they attract local or non-local money. Employment is used as a metric to measure the importance of each sector to the economy through the use of a location quotient, which is the ratio of the local employment per 1000 people in that sector of the economy versus the employment per 1000 people on a regional, state, or national level. Excess employment is the difference between actual employment and the employment that would exist if the employment per capita equaled the national or state average. Based on the estimates of Rex (2004) and Seidman (2008), Douglas was compared to other cities in the region, specifically border cities and other major cities in Cochise County. Zip codes included in the study encompassed the City of Douglas, the Census Designated Place Pirtleville, and unincorporated land covered by Douglas postal services.

Results

Total employment for zip codes 85607, 85608, 85626, and 85655 estimated by Zip Code Business Patterns 2005 (with government employment estimated by the *Douglas Perspective*) was 5694 people out of a total population of 22,465 people in 2005 (U.S. Census Bureau 2008). A second estimate of total employment in Douglas and Pirtleville (taken from the estimated workforce in 2005 from the *Douglas Perspective*) was 6434 people, composed of government employment, agriculture employment, and total non-agriculture private-sector employment. Total employment was approximately 253 jobs per 1000 residents – 57% and 53% lower than the national and state averages, respectively, but comparable to other small Arizona cities and towns. *Arizona Department of Commerce* (2007) now estimates the populations of Douglas and Pirtleville to be 17,660 and 1,470, respectively; the unincorporated part of the county has a population of approximately 3,335 people. From 2005 to 2007, Douglas has experienced a net increase in population by approximately 625 people, while the population of Pirtleville has decreased by approximately 370 people; the population of the unincorporated county zip code has remained largely the same (Carreira et al., 2007).

Rex (2004) and Seidman (2008) attribute the low employment figure was partially accounted for by the 2000 census, which recorded slightly more employed Douglas residents than jobs available in Douglas at the time. Rex (2004) and Seidman (2008) attributed the inconsistency to people who commuted to jobs in other cities and towns in the area. Additionally, according to Douglas Customs and Border Protection, some government employees lived (and continue to live) outside the Douglas area and commute to work from other cities such as Sierra Vista. A high number of youth in the general population also contributed to the low employment numbers given the total population; in Douglas and Pirtleville, 33.5% and 36.0% of the populations respectively were under the age 18 in 2000, compared to 25.7% nationally and 26.6% statewide (U.S. Census Bureau, 2000).

The total number of business establishments in Douglas, Arizona, decreased significantly from 2001 to 2004 and into 2005. Douglas lost 28 nonagricultural private sector establishments from 2001 to 2004; from 2004 to 2005, another 6 establishments were lost.

Agriculture and Government

Agricultural data was hard to gauge, but was estimated from the U.S. Department of Agriculture 2002 Census while government data was taken from 2004 Seidman data and the 2005 estimates of the *Douglas Perspective*. Location quotients were calculated using the

rounded averages based upon establishment size in order to reliably compare with the 2001 and 2004 data from Seidman Research Institute. For instance, for the retail trade sector, the midpoint of 5-9 employees (7 employees) times the total number of establishments in that size range (24) was used to roughly estimate employment for that sector ($24 \times 7 = 168$).

Agriculture for the Douglas region was largely a basic support activity including farming, ranching, and agricultural support activities. Total employment for the Douglas zip codes in agriculture was estimated at 44 people in 2005, with employment per 1000 people only 1/10 of the national average and 1/3 the state average, indicating that agriculture was not a basic support activity for the Douglas region.

Government was the largest sector in the Douglas economy, representing a mixture of activities; many of them are centered on either the border or in the Arizona State Prison located in Douglas. In 2005, approximately 2795 government employees worked in Douglas. Per 1000 residents, government employment for 2005 was at a high of 124 per 1,000 residents, 71% and 54% percent higher than state and national averages, respectively. Notably, government employment has gone down considerably since 2005, due in part to cuts in the number of Department of Homeland Security employees (Carreira et al., 2007). For 2007, most government employees were evenly divided between the federal, state, and local levels, as evidenced below.

Table 1: Largest Public Employers by Number of Employees– Douglas, Arizona

2005	2007
Department of Homeland Security - 1046	Arizona Department of Corrections - 651
Arizona Department of Corrections - 674	Douglas Unified School District - 541
Douglas Unified School District – 513	Customs and Border Protection - 471
Cochise College - 327	City of Douglas - 222

Source: *Douglas Perspective* 2005, 2007

Non-agriculture Private Sector Economy

Non-agriculture private sector employment in Douglas was approximately 2742 in 2005. Employment was low at 122 per 1,000 residents – 66-69% less than state and national averages, and indicative of low levels of economic development.

Unlike previous years, in 2005 several industries had location quotients greater than one, indicating more economic activity in those sectors. In comparison to the State of Arizona and

aside from the government sector, Douglas had location quotients greater than one in two sectors: forestry and agricultural support activities and transportation and warehousing sectors. The location quotient for retail trade was also close to one at 0.97. On a national level, location quotients were near one for both retail trade and transportation and warehousing. However, in nearly every other sector, Douglas was significantly below the national and state averages, scoring location quotients below 0.25 in 11 major sectors of the economy statewide and 9 nationally; for instance, the construction, manufacturing, wholesale trade, and finance and insurance sectors were all below 0.25 when compared both with state and national location quotients indicative of employment in that sector per 1000 people. This indicates a less diversified economic base and fewer organizations to provide certain kinds of services (for instance wholesale trade).

The only basic activity outside of the government that was export-oriented and had significant excess employment was transportation and warehousing with approximately 150 new employees in 2005 (See Table 2). Though recent data is not available, local sources indicate that there is no large long-distance shipping company in business in Douglas today. Retail trade expanded in 2005 significantly, in large part due to the opening of a Super Wal-Mart (408 employees); currently, other major private employers include Basha's/Food City (110 employees) and the Southeast Arizona Medical Center (104) (Carreira et al., 2007). As noted by Seidman (2004) and the *Douglas Perspective 2005*, though not traditionally a basic activity, out-shopping by Mexican citizens was an added economic boost to Douglas, Arizona and continues to add to the development of the retail trade sector. No conclusive study has been conducted in the region to assess the economic impact provided to the City of Douglas and Cochise County since 2002 (see Charney and Pavlakovich-Kochi, 2002).

Table 2: EMPLOYMENT BY SECTOR
Douglas (Zip Codes 85607, 85608, 85626, and 85655), 2005

Sector	# of Establishments	Employment (from averages of median estab. size)	Employment (From rate of growth)	Relative to Nation		Relative to Arizona	
				Location quotient	Excess Employment	Location quotient	Excess Employment
TOTAL	271	5694	5694	0.43	0	0.47	0.00
AGRICULTURE	11 (est.)	44	44	0.11	0.00	0.33	0.00
GOVERNMENT	9	2795	2795	1.54	984	1.71	1164
TOTAL, NON AGRICULTURAL PRIVATE SECTOR	262	2742	2552	0.31	0.00	0.33	0.00
Mining	0	0	0	0.00	0.00	0.00	0.00
Forestry, fishing, hunting, and agricultural support activities	1	7	7	0.54	0.00	1.19	1.14
Utilities	2	22	21	0.45	0.00	0.55	0.00
Construction	13	78	59	0.15	0.00	0.10	0.00
Manufacturing	4	118	97	0.11	0.00	0.18	0.00
Wholesale trade	10	69	64	0.15	0.00	0.19	0.00
Retail trade	74	1137	1000	0.96	0.00	0.97	0.00
Transportation & warehousing	16	289	79	0.90	0.00	1.04	10.73
Information	6	26	31	0.10	0.00	0.13	0.00
Finance & insurance	10	70	84	0.14	0.00	0.14	0.00
Real estate & rental & leasing	16	45	30	0.27	0.00	0.24	0.00
Professional, scientific & technical services	10	39	27	0.07	0.00	0.09	0.00
Management of Companies and Enterprises	0	0	0	0.00	0.00	0.00	0.00
Admin. support, waste mgt, remediation services	4	42	46	0.06	0.00	0.05	0.00
Educational services	4	99	16	0.45	0.00	0.67	0.00
Health care and social assistance	23	528	472	0.43	0.00	0.55	0.00
Arts, entertainment & recreation	4	19	18	0.13	0.00	0.11	0.00
Accommodation & food services	31	427	401	0.50	0.00	0.47	0.00
Other services (except public administration)	34	115	100	0.28	0.00	0.36	0.00

Source: Taken from Zip Code Business Patterns, 2005. Agriculture employment was based on 2004 data from the previous economic base study. Government employment numbers were based on information from Cochise College Center for Economic Research. Two estimates of employment (from averages of establishment size and from a rate of growth equation) were used due to gaps in the data.

Table 3
Transportation and Warehousing Industry showing Excess Employment for General Freight, Long Distance
Douglas, Arizona (Zip Codes 85607, 85608, 85626, and 85655), 2005

Industry	Number of Establishments	Employment (from averages of median estab. size)	Employment (2004)	2004-2005 Change	Relative to Nation		Relative to Arizona	
					Location quotient	Excess Employment	Location quotient	Excess Employment
General freight trucking, long-distance, truckload	1	3	0	+3	0.07	0	0.08	0
General freight trucking, long-distance, less than truckload	1	175	7	+168	8.85	155	13.69	162
Used household & office goods moving	1	14	14	0	1.67	6	1.80	6
Specialized freight (except used goods) trucking, local	2	6	3	+3	0.39	0	0.45	0
Specialized freight (except used goods) trucking, long-distance	2	18	2	+16	1.59	7	3.57	13
School & employee bus transportation	1	7	7	0	0.49	0	2.65	4
Motor vehicle towing	2	6	3	+3	1.58	2	1.41	2
Freight transportation arrangement	2	21	22	-1	1.52	7	2.13	11
Couriers	1	2	2	0	0.05	0	0.07	0
General warehousing & storage	2	37	8	+29	1.18	6	1.44	11

Source: Taken from detailed *Zip Code Business Patterns*, 2005. Highlighted industries are considered export-oriented (outside of basic services to the local community) industries that attract non-local money.

Excess employment in the transportation and warehousing sector largely came from the establishment of one long-distance general freight trucking company with between 100-249 employees. To date, approximately 8 shipping companies serve Douglas.

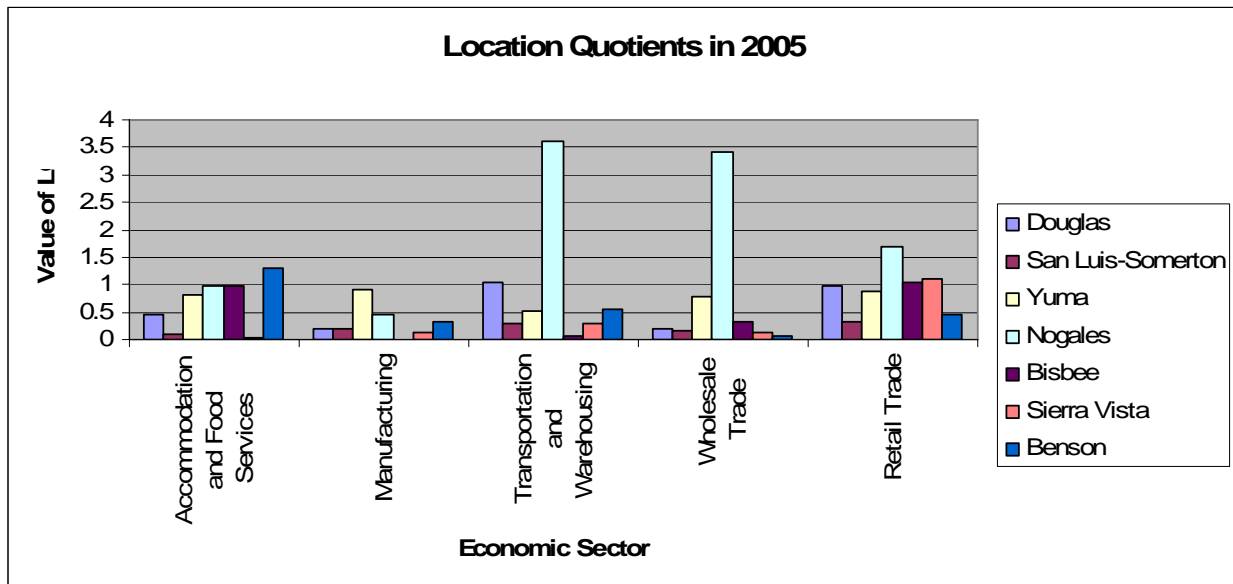
Douglas vs. Comparison Cities

In comparison to other cities in the region and other border cities around the state, especially the border cities Nogales and Yuma, Douglas's export-oriented industries remained underdeveloped in 2005. In previous economic base studies, Seidman Research Institute identified mining, tourism, most types of manufacturing, and most agriculture as basic activities that drive local economies by bringing in outside money. In 2005, aside from a statistically average accommodation and food service sector (indicative of tourism) and up from 2004 in part because of the opening of the Douglas Visitors Center, the only sector aside from government with excess employment was transportation and warehousing, indicative of increased industrial activity in Agua Prieta (Carreira et al. 2005).

Comparison cities were chosen based on 1) proximity – other incorporated cities of Cochise County 2) population size (from 50 to 150 percent of the population of Douglas) and 3) status as a border community. Therefore, based on comparison cities and towns identified by Seidman documents and from personal choice as a way to compare port development, the following cities and towns of Arizona were compared for specific industries related to money-generating sectors, including accommodation and food services, manufacturing, transportation and warehousing, wholesale trade, and retail trade.

- 1) San Luis-Somerton – border community
- 2) Yuma – border community
- 3) Nogales - border community, proximity, population size
- 4) Bisbee – proximity, population size
- 5) Sierra Vista – proximity, population size
- 6) Benson – proximity, population size

Graph 1
Location Quotients Comparison for Douglas vs. Other Cities in Arizona



Source: For Douglas, Estimated from U.S. Department of Commerce, Census Bureau, *Zip Business Patterns 2005*. For all other cities: estimated from Economic Base Studies datasets, Arizona Department of Commerce (using either 2004 or 2005 data).

The wholesale trade, transportation and warehousing sectors, and retail trade sectors for Douglas have all increased since 2001; these sectors now are closer to the location quotient values of Nogales and San Luis-Somerton / Yuma. When compared to San Luis-Somerton, Douglas had substantially larger location quotients in all sectors included above. The Yuma area was better diversified across all economic sectors. However, because new data has not yet been released, it is unknown what impact the Greater Yuma Port Authority (incorporated in September 2000) and port development activities have had since then.

Nogales still leads Douglas in important port-related activities, including wholesale trade, transportation and warehousing, and retail trade, possibly due in part to out-shopping from Mexico.

For non-border cities, Benson has lower values for every sector except for accommodation and food services, indicative of its location along the I-10 and Highway 80. Bisbee is largely supported by its small tourism industry and local government as the county seat – in 2005 it exceeded Douglas in the number of government employees (Seidman, 2008). Yuma and Sierra Vista, both larger cities with military bases, also had high rates of government employment and more diversified economies in other sectors, based on data from economic base studies

conducted by Seidman Research Institute (2007-2008). Assessments for the other major cities in Cochise County (Sierra Vista, Bisbee, and Benson) correspond to the assessments from the Southeastern Arizona Governments Organization (SEAGO) (2003) in their *Comprehensive Economic Development Strategy*.

2.2. Economic Base Study for Agua Prieta, Sonora (Municipality of Agua Prieta)

Based upon data from INEGI (2005) a similar location quotient comparison of employment by sector was developed for the City of Agua Prieta in comparison to both the state of Sonora and the country of Mexico (See Table 3).

Results

Agua Prieta has employment rates in the manufacturing sector 64% greater than the State of Sonora. It also has 6% greater employment in the finance & insurance, real estate & rental & leasing sectors compared to the State of Sonora.

Relative to Mexico, Agua Prieta has a maquiladora (manufacturing) sector with 89 people employed per 1000 people - 119% greater than the employment per 1000 people for Mexico as a whole (41 employees per 1000 people). Wholesale and retail trade and lodging and food services are 13% above the average employment per 1000 people for Mexico, indicative of larger amounts of consumption and trade. Social and personal services were 54% greater than for the whole of Mexico, indicative of a better developed social welfare system, better education opportunities, and more funding for arts and recreation.

Though Douglas fares worse in comparison to Arizona and the United States, Agua Prieta fares better in comparison to the state of Sonora and Mexico. Anderson & Gerber (2008) note the disparities between sister cities on both sides of the border –Mexican border cities tend to be the richest regions of the country with the best developed infrastructure, due in large part to the development of international trade and tourism, and especially the maquiladora (manufacturing) sector, while U.S. border towns tend to be smaller with less well-developed infrastructure.

The Agua Prieta Maquiladora (Manufacturing) Sector

The maquiladora (manufacturing) sector of Agua Prieta currently includes 22 export-oriented companies producing a wide range of goods, including electronics, seatbelts, velcro products, surgical disposables, and automobile parts and accessories (CANACINTRA, 2008).

Table 4
EMPLOYMENT BY SECTOR
Municipality of Agua Prieta, 2005

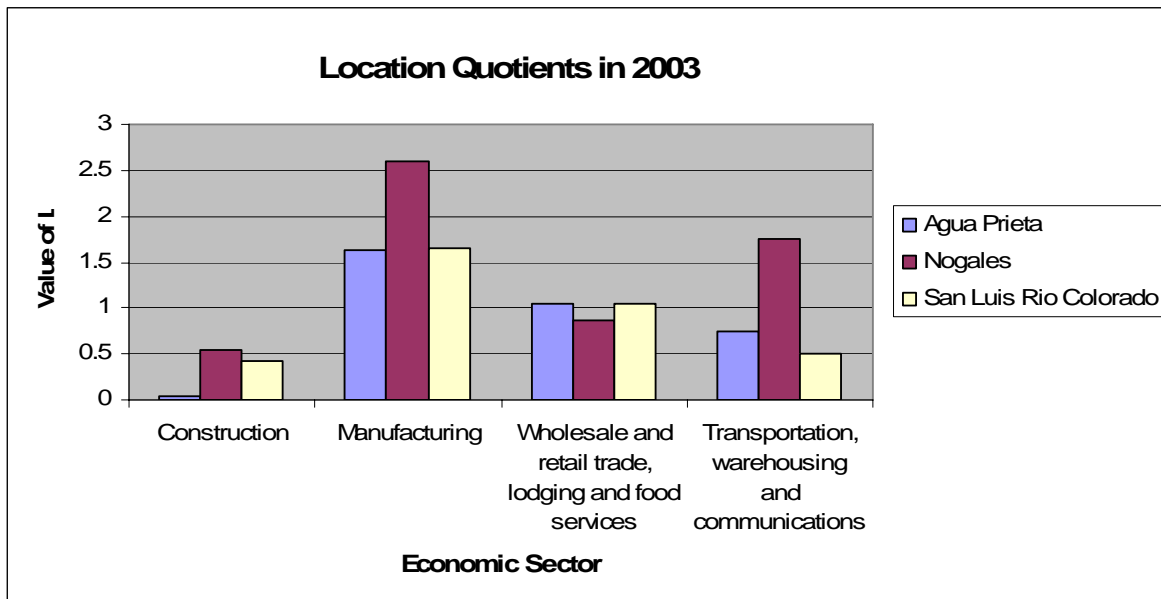
Year 2003		Relative to Nation		Relative to Sonora	
Sector	Total Employment	Location quotient	Excess Employment	Location quotient	Excess Employment
Mining	26	0.32	0	0.23	0
Utilities	130	0.89	0	0.68	0
Construction	38	0.09	0	0.05	0
Manufacturing	6,124	2.20	3340	1.64	2395
Wholesale and retail trade, lodging and food services	4,675	1.13	554	1.04	0
Transportation, warehousing and communications	352	0.84	0	0.70	0
Finance & Insurance, real estate & rental & leasing	250	0.83	0	1.07	16
Professional and business support services*	257	0.29	0	0.32	0
Social and personal services**	1,448	1.55	512	0.97	0

* Includes corporate, scientific and technical services. **Includes education, cultural, health, & public services and others.

Source: INEGI, Censos Economico 2004

Agua Prieta vs. Comparison Cities

Graph 2
Location Quotients Comparison for Agua Prieta vs. Other Border Cities in Sonora



Source: INEGI, Censos Economico 2004

In 2005, Agua Prieta had a construction sector significantly less developed than that sector in both Nogales and San Luis Rio Colorado, indicating that few new buildings (including commercial factories) were being built. Relative to San Luis Rio Colorado, there existed approximately the same per capita employment (about 90 employees per 1,000 people) in the manufacturing sector. However, both San Luis Rio Colorado and Agua Prieta had significantly lower location quotients than Nogales, which had a high location quotient of 2.60, or about 140 employees per 1,000 people. For 2005, Agua Prieta had a higher location quotient than San Luis Rio Colorado in the transportation, warehousing, and communications sector, an important sector for international trade, and indicative of commercial business activity in the region. However, both San Luis Rio Colorado and Agua Prieta had significantly lower per capita employment (4 employees per 1000 people and 5 employees per 1000 people, respectively) in the transportation, warehousing, and communications sector than in Nogales (13 employees per 1000 people).

3.0. Characterization of the Douglas Port of Entry

Both Douglas Arizona and Agua Prieta Sonora have strong economic ties to the port. Roughly 500 jobs with the federal government are provided by the port, including Customs and Border Protection, Immigration and Customs Enforcement, and U.S. Department of Transportation (Carreira et al., 2007). Economic activity at the port bolsters the wholesale trade, retail trade, transportation and warehousing, and business services sectors.

However, no conclusive or recent information has been condensed to better understand the physical infrastructure of the Douglas Port of Entry, trade flows through the Port of Entry, or possible advantages or disadvantages the port may have.

3.1. Movement of Goods through the Douglas Port of Entry

N



Picture 1: Diagram of the Douglas Port of Entry into the United States. Commercial vehicles enter into the docking bay on the far right, while passenger vehicles use the five passenger lanes to the left. Source: Border Infrastructure Project, <http://www.bip.arizona.edu/>

The Douglas Port of Entry serves both commercial and passenger vehicles at the same station. Commercially, approximately 78 trucks go through the port every day, according to data for the first seven months of 2007 (Bureau of Transportation Statistics, 2007). Very little seasonal variation exists with an annual average of 27,000 trucks since 2002. Based on anecdotal evidence from the interviews conducted, the majority of imports originate from the

two major copper mines in the area, Cananea and Nacozari, as well as local large maquiladoras in Agua Prieta, including Takata, MWC, and Velcro-Mex, based on CANACINTRA's (Cámara Nacional de la Industria de Transformación) 2008 directory.

Nearly 100 percent of the freight imported and exported through the Douglas Port of Entry is done by truck. By value, only 0.004% in 2006 and 0.001% in 2007 of exports to Mexico were via the Ferromex railway in Agua Prieta, Sonora. Natural gas pipelines also contribute to export trade; in 2006, natural gas exports to Mexico via pipeline were 0.25 million dollars in trade, or 0.06% of total export trade; in 2007, 0.93 million dollars or 0.23% of total export trade was by pipeline (according to the *Transborder Surface Freight Database 2008*).

A diagram (Picture 1) of the commercial and passenger port of entry is above. Commercial vehicles, including buses, freight trucks, and commercial trucks, enter into the docking and inspection area to the east of the passenger entry into the United States. They cut across passenger lanes of traffic coming into the United States to do so. Drivers submit the necessary paperwork and pay any necessary fees at the checkpoint at the commercial entrance, and then proceed to the docking bay for inspection. One to three vehicles line up, and are X-rayed. Every vehicle is X-rayed (Picture 2) by a mobile X-ray unit, the only one available to Douglas Customs and Border Protection. Canine units examine all commercial vehicles for drugs and other contraband, and then the vehicles are sent to a final checkpoint with officers from the Arizona Motor Vehicle Division, who checks the driver's personal identification, personal goods, truck license, and trailer number (Cambridge Systematics, Inc., 2004). According to a local customs broker and Customs and



Picture 2: Mobile X-Ray Unit at the Douglas POE showing two commercial vehicles en route to the United States.

Border Protection (CBP), nearly all commercial vehicles next proceed to the U.S. Department of Transportation weigh station for a safety inspection. According to CBP, two USDA (United States Department of Agriculture) agents are on staff to check agricultural loads going through the port of entry (produce was 0.02% of import trade by value in Douglas in 2006 and 0.09% in 2007).

3.2 Imports and Exports through Douglas

Imports

Douglas Customs and Border Protection released a complete list of imports into the United States by Harmonized Tariff Code. A list of the top ten imports for the years 2006 and 2007 is included below; see Appendix 1 for a complete of the top 40 import products with trade value and as percentages of the total trade that year. Total import trade for 2006 was \$737 million, while import trade for 2007 totaled \$910 million.

Table 5: Top Ten Imports, 2006 (by 10-digit HTS code)

<u>Rank</u>	<u>Description</u>	<u>Value</u>	<u>Percentage of Total Import Trade</u>
1	REFINED COPPER WIRE>6mm=<9.5	172,775,853	23.4
2	IGNITION WIRE: VEHICLE, SHIP, AIR	47,635,494	6.5
3	BODY PART, ACCESS:OTH 8701-8705	64,106,489	8.7
4	ROASTED MOLYBDENUM ORES & CONC	42,561,901	5.8
5	PLAST, BLINDS (INC. VENETIAN)	34,000,578	4.6
6	OTH ART ASMB W/US FAB COMPONTS	55,105,245	7.5
7	REF COPPER: CATHODES/SECTIONS	34,096,744	4.6
8	UNWROUGHT SILVER BULLION	34,016,378	4.6
9	OTH LV MLE BV ANM=>90KG<200KG	19,209,913	2.6
10	ALUM VENETIAN BLINDS& SHUTTERS	16,994,127	2.3

Source: Douglas Customs and Border Protection

Table 6: Top Ten Imports, 2007 (by 10-digit HTS code)

<u>Rank</u>	<u>Description</u>	<u>Value</u>	<u>Percentage of Total Import Trade</u>
1	REFINED COPPER WIRE>6MM=<9.5	205,567,666	22.6
2	REF COPPER:CATHODES/SECTIONS	128,338,644	14.1
3	ROASTED MOLYBDENUM ORES & CONC	66,974,197	7.4
4	BODY PART,ACCESS:OTH 8701-8705	61,558,409	6.8
5	IGNITION WIRE:VEHICLE, SHIP,AIR	58,833,717	6.5
6	OTH ART ASMB W/US FAB COMPONTS	52,822,328	5.8
7	UNWROUGHT SILVER BULLION	42,922,001	4.7
8	PLAST,BLINDS (INCLUDE VENETIAN)	35,408,637	3.9
9	OTHR US GDS RETURN:OTHR,N/ADV	26,670,114	2.9
10	OT LVE MLE BVNE ANM 200<320 KG	22,051,047	2.4

Source: Douglas Customs and Border Protection

The top 40 imports account for 96.7% of the total trade through Douglas for 2006 and 95.6% of the total trade for 2007. By far, the largest import item is refined copper wire, reported locally to originate in the mines in Cananea and Nacosari. The imports are heavily natural resource based; for 2006 and 2007, 41.0% and 50.2%, respectively, of the trade was based on mineral ores and basic refined forms for copper, molybdenum, silver bullion, and gold bullion. Bovine animals were 5.6% and 4.5% of the trade for 2006 and 2007, respectively. Approximately 4.1% of 2006 imports and 3.1% of 2007 imports were returned U.S. goods that were not improved upon, classified by local customs brokers as industrial waste from the maquiladoras of Agua Prieta.

Exports

A complete list of the top 25 exports into the United States by SITC (Standard Industrial Trade Classification) for the years 2006 and 2007 is attached in Appendix 2. They roughly correlate to similar Harmonized Tariff Codes.

Additionally, in 2007, the Bureau of Transportation Statistics began releasing export data by port that includes 2-digit harmonized tariff codes.

For 2006 through 2007 the majority of top exports to Sonora were manufactured products. For 2007, refined copper was a major export ranked number 3, perhaps due to the recent jump in copper prices or due to the five-month miner's strike at Cananea (Bacon, 2007). Molybdenum ore, both roasted and not roasted, was a major export for both years (#1 in 2006 and #2 in 2007), possibly as a by-product of copper mining in Arizona, given that most of the total export trade currently originates in Arizona.

Table 7: Top 10 Exports, 2006 (by 5-digit SITC code)

Rank	Description	Value	Percentage of Total Export Trade
1	Molybdenum Ores And Concentrates, Other Than Roasted	103,386,009	23.1
2	Other Parts And Accessories Of Motor Vehicle Bodies Of Headings 8701 To 8705 (Including Cabs)	34,396,735	7.7
3	Dumpers Designed For Off-Highway Use	20,439,038	4.6
4	Boring Or Sinking Machinery N.E.S., Self-Propelled	17,859,345	4.0
5	Parts N.E.S. For Use Solely Or Principally With Electric Motors, Electric Generators, Electric Generating Sets And Rotary Converters	17,844,402	4.0
6	Measuring Or Checking Instruments, Appliances And Machines, N.E.S.; Profile Projectors	10,825,129	2.4
7	Electrical Apparatus For Switching Or Protecting Electrical Circuits Or Making Connections To Or In Electrical Circuits, N.E.S., Not Exceeding 1,000 V	9,906,120	2.2

8	Parts Of Electrical Apparatus For Switching Or Protecting Electrical Circuits For Making Connections To Or In Electrical Circuits, N.E.S.	9,808,553	2.2
9	Articles Of Plastics, N.E.S.	9,762,557	2.2
10	Parts For Boring Or Sinking Machinery	7,171,490	1.6

Source: Texas Center for Border Enterprise and Economic Development (2008)

Table 8: Top 10 Exports, 2007 (by 5-digit SITC code)

<u>Rank</u>	<u>Description</u>	<u>Value</u>	<u>Percentage of Total Export Trade</u>
1	Other Parts And Accessories Of Motor Vehicle Bodies Of Headings 8701 To 8705 (Including Cabs)	40,728,617	10.2
2	Molybdenum Ores And Concentrates, Other Than Roasted	30,404,362	7.6
3	Refined Copper	16,216,015	4.0
4	Articles Of Plastics, N.E.S.	12,101,948	3.0
5	Insulating Fittings For Electrical Machines, Appliances Or Equipment, Of Plastic Materials, But Not Including The Insulators	11,150,865	2.8
6	Parts suitable for use solely or principally with the apparatus falling within subgroups 772.4, 772.5 and 772.6 - Other parts	9,940,379	2.5
7	Other electric conductors, for a voltage not exceeding 1,000 V	9,504,016	2.4
8	Measuring Or Checking Instruments, Appliances And Machines, N.E.S.; Profile Projectors	8,466,059	2.1
9	Iron And Nonalloy Steel Flat-Rolled Products, Painted, Varnished Or Plastic Coated, Under 600 Mm Wide	7,940,468	2.0
10	Parts Of Machinery For Sorting, Washing, Crushing Or Mixing Earth, Stone, Ores Etc., And For Shaping Solid Mineral Fuels, Ceramic Pastes Etc.	7,655,036	1.9

Source: Texas Center for Border Enterprise and Economic Development (2008)

3.3. Trade Flow Patterns

Data for trade flows through the Douglas Port of Entry for both imports and exports were obtained through the Transborder Surface Freight Database of the Bureau of Transportation Statistics for the years 2006 and 2007.

Trade Flow by Transport Mode and Origin/Destination

Rail and road shipments that pass through the Douglas Port of Entry are shown in Table 9 below.

Table 9: U.S. State Share of Exports to Mexico via Douglas Port of Entry, by Transport Mode (in percentages, showing states with at least 1% share of trade)

U.S. State	Exports to Mexico - Origins					
	2006			2007		
	Rail	Truck	Total	Rail	Truck	Total
Arizona	---	63	63	100	76	76
California	---	1	1	---	1	1
Florida	---	4	4	---	1	1
Kentucky	100	---	4.40E-05	---	---	0
Pennsylvania	---	0.3	0.3	---	3	3

Texas	---	2	2	---	5	5
Utah	---	23	23	---	8	8
Virginia	---	1	1	---	3	3
Wisconsin	---	4	4	---	0.2	0.2
Other States	---	1.7	1.7	---	2.8	2.8
Total:	100	100.00	100	100	100	100
Value, USD in millions	0.02	447	448	4.50E-03	400	401

Source: *Transborder Surface Freight Database, 2007*, Bureau of Transportation Statistics, U.S. DOT

The individual U.S. state shares of exports to Mexico are shown in columns 1 through 6. Though Agua Prieta has a functioning rail system, rail exports to Mexico made up an extremely small part of total shipments with a total trade value of approximately \$24,500 combined for both 2006 and 2007. Arizona accounts for the majority of trade for both years, indicating that Douglas has remained a regional port. In 2006, 23% of road shipments originated in Utah, though in 2007 that number dropped to just 8%, while Arizona's share of exports jumped by 13%.

Table 10: Mexican State Share of Exports to Mexico via Douglas Port of Entry, by Transport Mode (in percentages, showing states with at least 1% share of trade)

Mexican State	Exports to Mexico - Destination					
	2006			2007		
	Rail	Truck	Total	Rail	Truck	Total
Coahuila	---	2	2	---	3	3
Distrito Federal	100	1	1	0	2	2
Estado de Mexico	---	1	1	---	2	2
Nuevo Leon	---	0.2	0.2	---	4	4
Sonora	---	95	95	---	87	87
Unknown	---	---	---	100	---	---
Other States	---	0.8	0.8	---	2	2
Total:	100	100	100	100	98	98
Value, USD in millions	0.02	447	447	4.50E-03	400	401

Source: *Transborder Surface Freight Database, 2007*, Bureau of Transportation Statistics, U.S. DOT

Table 10 indicates the destination of exports from the United States. In 2006, 95% of all trade was marked for Sonora, with only small percentages marked for other Mexican states. In 2007, Coahuila (at 3% of trade) and Nuevo Leon (at 4% of trade) increased while Sonora's

market share decreased to 87% of all exports through the Douglas Port of Entry. However, exports to Mexico remain highly regionalized within the state of Sonora.

Table 11: U.S. State Share of Imports from Mexico via Douglas Port of Entry, by Transport Mode (in percentages, showing states with at least 1% share of trade)

U.S. State	Imports from Mexico		U.S. State	Imports from Mexico	
	2006	2007		2006	2007
	Truck	Truck		Truck	Truck
Arizona	55	51	New York	6	17
Colorado	0.3	1	Ohio	2	1
Connecticut	1	5	Rhode Island	4	3
Iowa	5	0.3	Texas	14	12
Illinois	1	1	Utah	4	3
New Mexico	4	2	Virginia	1	1
			Other States	2.7	2.7
			Total	97.3	60.3
			Value, USD in millions	709	885

Source: *Transborder Surface Freight Database, 2007*, Bureau of Transportation Statistics, U.S. DOT

Table 11 indicates that about half of all imports into the Douglas Port of Entry have a listed destination within Arizona. Another considerable percentage (14% in 2006, 12% in 2007) are delivered to Texas, while in 2007, shipments to New York increased by 11%. Most other states had shares of 5% or less, with significant fluctuations only in the amount of import trade to Iowa.

Table 12: Mexico vs. International Share for Top 10 Imports by Trade Value & HTS Code from Mexico via Douglas Port of Entry, 2006-2007 (by percentages of total trade)

Import	Mexico		International	
	2006	2007	2006	2007
1. 740811 Copper Wire/Refined Copper	24.8	23.5	0	0
2. 740311 Refined Copper Cathodes and Sections Thereof	3.5	15.2	0	0
3. 870829 Motor Vehicle Body Parts and Accessories	13.9	10.9	0.01	0.01
4. 261310 Roasted Molybdenum Ores and Concentrates	6.0	6.9	0	0
5. 854430 Vehicle, Etc Insulated Wiring Sets	6.7	6.5	0	0
6. 710691 Unwrought Bullion and Other	4.4	4.7	0	0
7. 010290 Bovine, Not Pure Breeding	7.5	4.3	0	0

8. 392530 Shutters, Blinds, Etc	3.6	3.7	1.3	0.4
9. 980100 Other U.S. Goods Returned, Not Changed	4.2	2.9	0	0.05
10. 761699 Other Articles Of Aluminum	2.4	1.7	0	0
	Total Import Trade (in millions of USD)		664.9	844.0

Source: GTIS Database, courtesy of Seidman Research Institute, 2008

Table 12 shows data from Seidman Research Institute indicating the national origins of the top ten imports through the Douglas Port of Entry. Aside from shutters and blinds, a portion of which originated in Canada, none of the top 40 imports for 2005 through 2007 had more than 0.7 million in USD originating outside of Mexico. Though the database does not allow for disaggregation by state in Mexico, the data indicates that Douglas is highly regional with little to no international trade traffic.

Comparison to Nogales and San Luis-Yuma

Table 13: Trade Flows by Land between the United States and Mexico, by Port of Entry in Arizona, 2007 (USD in millions)

Direction of Trade Flow	Douglas	Nogales	San Luis-Yuma	U.S. Total
U.S. Exports to Mexico	401.6	6036.5	426.9	136541.3
U.S. Imports from Mexico	885.1	12232.3	705.0	210799.0
% of U.S. Export Trade	0.3	4.4	0.3	
% of U.S. Import Trade	0.4	5.8	0.3	

Source: *Transborder Surface Freight Database*, 2008, Bureau of Transportation Statistics, U.S. DOT

Table 13 compares the value of import and export trade flows between Douglas, San Luis, and Nogales, Arizona. Based on the data below, Douglas controls a 0.1% larger share (or 180 million dollars more) of the total U.S. imports from Mexico than San Luis controls, but about 13 times less than the share Nogales controls. Conversely, Douglas controls slightly less of the export trade than does San Luis, and Nogales again controls about 13 times more of the U.S. export market. In terms of total trade, San Luis and Douglas have roughly the same trade values, while Nogales controls a much larger share of the statewide trade. However, 4.4% of export trade and 5.8% of import trade for Nogales is still relatively small when compared to the trade share of larger ports, such as Laredo, Texas, and San Ysidro, California.

3.4. Transportation Infrastructure

Rail

According to the Arizona Rail Plan (2000) put out by the Arizona Department of Transportation, San Pedro and Southwestern Railroad (SWKR) owned and operated the Douglas rail branch that originally ran north to Tucson, west to Nogales, and east to New Mexico. The western and eastern branches were abandoned in the early 1900s, but SWKR abandoned the northern branch soon after the closure of the Douglas copper smelter in the 1980s. StatesRail bought the line, which was subsequently bought out by Rail America in 2001 (Railway Age). To date, there are no plans to renovate and reopen the rail line from Douglas north to Tucson. The portion of the SWKR line from the neighboring border town of Naco, Arizona (about 6 miles south of Bisbee, Arizona) was operational until 2005, when SWKR filed for abandonment of the line (R.L. Banks & Associates, Inc., 2007). Hence, Douglas has no close-by operational rail lines and relies exclusively on truck-based transport.

In Agua Prieta, the Ferromex rail line (owned by mining conglomerate Grupo Mexico who owns controlling shares in copper mines Nacosari and Cananea) continues to operate. However, trade into Mexico using the railway is extremely low, and, in terms of exports, is only used under special circumstances (Garcia & Ibarra, 2006).

Air

Two airports serve the Douglas area, Bisbee-Douglas International Airport (BDI) and Douglas Municipal Airport (DGL). No commercial service has operated out of either airport in decades, according to their master plans (Gannett Fleming Engineers and Planners et al., 1997, and Armstrong Consultants, Inc., 1994). However, according to Walker and Pavlakovich-Kochi (2002), both airports have the potential to be used commercially despite limited capacity for commercial use due to limited trade flows. Currently, two businesses located in the Douglas-Agua Prieta region (Bob Fernandez & Sons, Inc., and MWC, Inc.) are working to attract specialized air freight service out of Douglas Municipal Airport. Air freight service is currently provided by FedEx and UPS out of Sierra Vista, both of which then fly to Tucson (according to FedEx and UPS websites, 2008).

Both airports currently hangar planes for personal use, while charter flights for local companies occasionally land at BDI, especially for the Arizona State Prison located nearby. According to local sources, BDI currently leases land and buildings to outside businesses,

including veterinary services, storage services, and various office spaces. A large amount of land is leased to the Arizona Bureau of Prisons for the Arizona State Prison located just north of Douglas. If Douglas were to have commercial service, renovation of the existing facilities, including clearing office space in the terminal building, and consideration of the Arizona State Prison located on airport land, would be necessary.

No airlines serve the Agua Prieta region in Mexico.

Road

Douglas, Arizona is served by three major highways, AZ-80 to AZ-90 through Sierra Vista to the I-10 (83 miles), AZ-80 through Tombstone to Benson and the I-10 (81 miles) and U.S.-191 through Elfrida to the I-10 (67 miles) (Google Maps, 2008). All three highways are two-lane with varying speed limits from 45 mph to 65 mph. From Sierra Vista, the AZ-90 is four-lane until the I-10, a distance of approximately 35 miles, the only four-lane stretch on the entire highway segment from Douglas to the I-10. From an initial round of interviews conducted in February 2008, the highways out of Douglas were identified as a problem for freight shippers out of the Douglas area.

Agua Prieta, Sonora is served by two Mexican highways, MX-14 and MX-15. According to local sources, both highways are two-lane and in a state of disrepair. Local sources note that the governments of Agua Prieta and Sonora have been trying to find monies to build a four-lane highway from the local major city of Hermosillo to Agua Prieta, which would provide for trade growth from the southern states of Mexico. To date, the project remains unfunded.

3.5. Telecommunications Infrastructure

High speed broadband telecommunications and reliable basic telephone communications are necessary for port and economic development in the Douglas region (Conover, 2002; Erie, 1999; ATIC, 2008). The Statewide Economic Survey -“Arizona’s Transportation Infrastructure” – asserts that development of high-speed telecommunications is achieved through point-of-presence (a connection) to long-haul fiber optic cable that is in turn connected to other such lines across the country (forming the Internet) (Conover, 2002). Due to tremendous growth in high-speed technology around the nation, Douglas as a city has sufficient telecommunications infrastructure. However, the Action Plan for Douglas, Arizona (2007-08) notes that for the

greater Cochise County region up to the I-10, service areas for mobile phones are somewhat spotty and haphazard.

Table 14: Comparison of Numbers of Telecommunications Service Providers

	Douglas	Nogales	Yuma	Sierra Vista	Bisbee	Benson
1. Internet Service Providers	43	42	43	45	41	44
-Cable Internet	13	12	12	13	12	13
- DSL (Digital Subscriber Line)	21	20	21	22	21	21
-High speed wireline data transfer (>50 Mbps)	26	25	25	27	25	26
2. Public teleconference facilities & Data Centers for serving hosting	15	14	14	30	28	29
3. Video services for broadband/satellite feed	13	12	12	14	12	12
4. Mobile wireless data capability	23	22	23	23	22	23
5. Fixed wireless data capability	12	16	16	16	15	14

Source: Arizona Telecom Directory, developed by the Arizona Telecommunications and Information Council (ATIC)

Douglas has roughly equivalent numbers of telecommunications service providers in comparison to other border cities of Arizona and other cities in Cochise County. Therefore, Nogales and San Luis-Yuma do not have a competitive advantage in terms of telecommunications infrastructure, to the best availability of comparable data.

For non-high speed connections, and according to Census 2000 estimations, 95.4% of households and businesses in the Douglas/Cochise County region were equipped with basic phone services. To date, there are 54 telephone service providers in the Douglas area, while 17 providers have mobile phone services (ATIC, 2008).

3.6. SWOT Analysis

Based on the above information, as well as interviews conducted in February 2008 with five local port users, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was developed for the Douglas Port of Entry relative to its position as the second largest port of entry into Arizona behind Nogales. Based upon the concern of five major port users and the input of several skilled members in the economic development field, a list of possible opportunities for the Douglas Port was developed. The list of opportunities and threats shown below were developed from both the series of interviews held in February 2008 as well as discussions held among the developers of this report.

Chart 1: SWOT Analysis for Port of Entry Development – Douglas, Arizona

Strengths	Weaknesses
<ul style="list-style-type: none"> • Established port infrastructure • Short wait times • Available labor pool • Available international airport • Douglas International Port Authority 	<ul style="list-style-type: none"> • No rail in Douglas • Poor mobile phone coverage in county • Imports are heavily natural resource-based • Significant distance from I-10 and major roadways • Low level of high school graduates • No commercial services at the airport • Only three customs brokers available; two are remote
Opportunities	Threats
<ul style="list-style-type: none"> • Douglas has been named the eastern corridor for CANAMEX. • Also named as a possible reliever port for Nogales, especially during the high season for produce imports. • Scheduled GSA port redevelopment. • Untapped markets in the interior of Mexico. • Remote brokering possibilities from other border regions. • Cochise County Enterprise Zone 	<ul style="list-style-type: none"> • Competition from better-established ports in the Southwest, as well as Nogales and Yuma. • Relocation of sectors of the manufacturing industry to other locations worldwide (Ex: China). • Drug smuggling trade in Agua Prieta.

Strengths

An established port infrastructure in Douglas (including customs brokers, freight companies, warehousing services, etc.) allows more business development. Douglas has exceptionally short wait times for commercial vehicles, estimated at about an hour or less by interviewees. A local airport is available, though most companies use local services (FedEx and UPS), which ship to regional airports in Sierra Vista and Tucson. A substantial and young labor force is available, though it is not a highly educated labor force. Additionally, a large proportion of the population is bilingual. The recently formed Port Authority provides new opportunities to better market and to attract funding for the port.

Weaknesses

Douglas, Arizona has a relatively weak transportation infrastructure, with very few investments made to improve the roads beyond a local level. The rail line has been abandoned and is in disrepair; there is no commercial airline service into and out of the city; major roads and highways that lead to I-10 are mostly two-lane and with speed limits between 45 and 65 miles per hour. Imports are heavily based on natural resources, especially copper, molybdenum, and gold and silver bullion, which indicates low levels of high technology industries in the area and the money such industries bring in. It is also indicative of poor telecommunications coverage – significant expanses of the county do not have cellular service, though high speed telecommunications are available within Douglas itself. Low educational levels are also a problem for companies, especially high-technology companies, who want to move into the area; according to Census 2000 estimates, only 54.8% of the population had a high school education or more. Additionally, approximately 30% of the local population self-identified as speaking English less than very well (U.S. Census, 2000). Only three brokerage services are available, one of which (OSVIL International, LLC) is local and reported handling approximately 85% of the trade in the area.

Opportunities

The biggest opportunity comes as a result of the Governor's CANAMEX Task Force. Douglas has been named the Eastern corridor of CANAMEX, to serve as a reliever port to Nogales, Arizona. Named in official documentation as such, it provides Douglas with a leverage point for funding and marketing. As noted by Walker and Pavlakovich-Kochi (2002), Douglas has ample docking space, but the port of entry itself has no room to expand if trade and passenger flows increase. The General Services Administration Feasibility Study, completed in January 2008, provides an opportunity for the community to determine the new physical design and infrastructure for the port, including the mix of commercial to passenger vehicle space and necessary equipment (including X-ray & inspection units, cold storage facilities, etc.). Proper marketing and relationships in the interior of Mexico will increase trade. For instance, local sources point to the Hass avocado trade that now goes through the Douglas port rather than through San Diego due to shorter wait times. Remote brokering, including the establishment of satellite branches of Douglas-based customs broker firms in Nogales, Arizona, also has the possibility to expand trade through Douglas, especially if (in the context of the Nogales produce

trade) Douglas is promoted as a reliever port during times of high traffic. Additionally, Cochise County has been named an Enterprise Zone by the State of Arizona, allowing income or premium tax credits for small businesses (less than 200 employees) and property tax benefits for small (less than 100 employees) or minority/woman-owned businesses (AZDOC, 2006). The Enterprise Zone is a leverage point for further development in the Douglas region.

Threats

The Douglas Port of Entry is not as well-established or as large as other ports along the U.S.-Mexico border. It faces competition locally from other ports in Arizona, California, and New Mexico, especially due to its location 223 miles from Hermosillo, Sonora, and over three hundred miles from Chihuahua, Chihuahua. The relocation of manufacturers abroad (for instance to China) due to cheaper labor and lower overhead is also a threat. The Douglas region is a major target for drug and other smugglers, with more than 500 CBP (Customs and Border Protection) agents currently patrolling the area; incidents of smuggling and related violence may deter potential port users.

4.0. Douglas Port Development Questionnaire

Both to assess more directly trade flows from the port that involve local companies and to gauge the needs of port users, a questionnaire was developed in late February – early March 2008, and was first distributed late March 2008. The questionnaire was based on the concerns of major port users and members of the new Douglas Port Authority, and drafted according to the questionnaire used by Klingner et al. (1997). An initial round of interviews with five port users was conducted in February 2008, and was used to further develop the questionnaire. Versions of the cover letter and questionnaire in both English and Spanish are provided in Appendix 4.

Based on the stated objectives of the City of Douglas, Arizona, as well as the concerns identified by the round of interviews in February 2008, the questionnaire was developed to address several questions, including:

- 1) The lack of information regarding trade flows through the Douglas region;
- 2) The opinions of Douglas port users on the adequacy of local infrastructure;
- 3) Whether there is significant local demand for the establishment of air freight service through Bisbee-Douglas International Airport; and

4) The kinds of roles Douglas Port of Entry commercial users want the newly formed Douglas International Port Authority to play.

Between February 14-15, 2008, when the initial round of interviews was conducted and late March 2008, six drafts of the questionnaire were created and 25 business organizations based in or around Agua Prieta were identified as potential recipients of the survey. The 25 organizations were chosen based on a comparison between two lists: the list of organizations in the Agua Prieta Maquiladora Association and the CANACINTRA “Directorio de la industria maquiladora de exportacion” (See Appendix 5 for a complete list).

The questionnaire was first launched on March 27, 2008, at the March meeting of the Agua Prieta Maquiladora Association. The primary researcher (Kimberly Hill) established e-mail and phone contact with representatives of at least six of the 25 target organizations, representing the entire maquila industry of Agua Prieta and the surrounding area. The remaining 19 organizations were contacted through personal visits and phone calls made by Ana Rivera, Douglas Visitor’s Center. During this time the cover letter and questionnaire were translated into Spanish and distributed more widely in Agua Prieta. Questionnaires continued to be collected until late June 2008; the study team used in-office visits, phone calls, and e-mail reminders for data collection.

4.1. Douglas Port Users Interviews

A series of three interviews (one individual and two group) with five individuals from the Douglas community was conducted from February 14-15, 2008. The information letter and interview schedule are available in Appendix 3. The five interviewees represented local maquiladora managers, government officials, and service providers for port users in the Douglas area. Concerns brought up by the interviews were used to draft the Douglas Port Development Questionnaire.

All five people interviewed identified the short wait time at the Douglas Port as a major advantage, while noting problems with the transportation infrastructure up to the I-10, specifically due to the lack of a four-lane highway. The possibility for Douglas acting as a reliever port for the produce market in Nogales was mentioned by four interviewees, while nearly all of them mentioned communication problems as a major issue. All interviewees found Douglas to be an extremely adequate port of entry, though they all mentioned problems specific

to their business in dealing with the port on either the Mexican or the U.S. side. All five interviewees saw potential in either Bisbee Douglas International Airport or Douglas Municipal Airport, noting that most commercial port users ship goods by truck to either Sierra Vista or Tucson to put them on a FedEx or UPS plane. All five showed an interest in developing the Port Authority as an organization focused on the economic development of the Douglas/Agua Prieta region for the benefit of both port users and the community at large. The anecdotal information provided was then used to develop the questionnaire, asking specific questions about the airport, the current port infrastructure, and potential roles the Douglas International Port Authority could play or value-added services it could provide.

4.2. Results of the Douglas Port Development Questionnaire

Of the 25 organizations identified for distribution of the survey, 10 responded; notably one organization, Goleta Coil, was no longer in operation in Agua Prieta despite its presence in the directory due to a fire. 10 respondents represents an approximately 40% response rate and a convenience sample of the local community. Two surveys were not fully completed and some organizations declined to respond to some questions, citing confidentiality issues. The sample, therefore, was a convenience sample, and is not representative of the Douglas business community or Douglas port users as a whole.

As shown by the table below, nine of ten respondents identified as being physically located in Agua Prieta, and, in one case, Agua Prieta and Douglas. Half of the responding organizations had employment sizes between 100 and 1000 persons – five organizations, including the two largest respondents with more than 1000 employees, identified as primarily assembly operations. Two organizations, both with between 100 and 1000 employees, identified as fabrication operations. The two smallest operations (with less than 100 employees) both identified as “other” kinds of operations, one of which identified itself both as an assembly plant and other (denoted by dividing its percentage in half). The eight organizations that answered question 6 (regarding the tonnage and value of their annual products) identified their products with a net worth of approximately \$161 million, or about one-ninth of the total export value through the Douglas Port of Entry for the year 2007.

In terms of air freight, the majority of respondents (40%) only ship by air 1-2 times per month. Two organizations that ship 1-2 times per month that answered question 10 (regarding

the amount of weight shipped) wrote that they ship 50 to 300 pounds on average. The two organizations that ship once per day ship either 500 pounds per day or 2000 pounds per week, considerably more than operations that only ship 1-2 times per month. The two organizations that ship several times per day ship either small amounts (20 lbs/day, 60 lbs/week) or large amounts (200 lbs/day, 1000 lbs/week). Three organizations declined to respond to question 10.

Table 15: Basic Description of Respondent Operations

Question Number				
4. Physical Location of Business Operation	Agua Prieta 80%	Douglas & Agua Prieta 10%	Other 0%	No answer 10%
7. Size of operation (by number of employees)	0-100 persons – 20%	100-1000 persons 50%	>1000 persons 20%	No answer 10%
8. Employment type	Assembly - 45%	Fabrication – 20%	Other – 25%	No answer 10%
9. Use of air freight	1-2 times/month – 40%	1-2 times/week – 10%	Once/day – 20%	Several times/day – 20%

4.3. Attitudes about Current Infrastructure Surrounding the Port

Question 12 of the questionnaire asks respondents to rate the current port infrastructure on a scale from 1 (very inadequate) to 6 (very adequate) to gauge what port users find adequate or inadequate about the port. One questionnaire was not completed for this question; therefore a total of nine questionnaires were completed.

Table 16: Results of Question 12

	1-2 (Very inadequate to inadequate)	3-4 (Somewhat inadequate to somewhat adequate)	5-6 (Adequate to very adequate)
Communication/representation of the Port of Entry and port users with federal officials and departments (in the United States)	~22%	~33%	~44%
Communication/representation of the Port of Entry and port users with federal officials and	~22%	~44%	~33%

departments (in Mexico)			
Communication/representation of the Port of Entry and port users with Arizona state officials and departments	~11%	~44%	~44%
Communication/representation of the Port of Entry and port users with Sonora state officials and departments	~11%	~66%	~22%
Communication between the Port of Entry, port users, and government officials at a local level (within Douglas and Agua Prieta)	~22%	~11%	~66%
Wait times at the Douglas Port of Entry	0%	~77%	~22%
Freight & warehouse services available in Douglas, Arizona	~22%	~44%	~33%
Transportation Infrastructure in Mexico - along MX-14 or MX-15	~33%	~55%	~11%
Transportation Infrastructure in Arizona – along AZ Highway 80 or 90 or U.S. Highway 191	0%	~55%	~44%
Current physical design of the Douglas Commercial Port of Entry	~11%	~55%	~33%

Overall, attitudes toward the current port infrastructure are positive. Most respondents found communication with local, state, and national governments and government officials adequate to their needs. Notably, on the national and local levels (in both Mexico and the United States) at least two respondents found the current structure inadequate; on the national level, this may be in part due to Douglas-Agua Prieta's lack of visibility, while on a local level, local problems are both more visible and more immediate to the needs of local port users; an example noted by one interviewee in February was the problem of Mexican holidays, when the port is closed down unexpectedly on the Mexican side, causing problems for the companies. On the level of the State of Sonora, six respondents found it somewhat adequate to somewhat inadequate but did not give it either high or low marks.

Three respondents named transportation problems along highways in Mexico a major concern (while five respondents marked it as somewhat adequate/inadequate), though all respondents found the transportation infrastructure in Arizona adequate or somewhat adequate. Wait times at the physical port received high marks; no one found the current port design completely inadequate, though most found it somewhat inadequate.

4.4. The Possibility for Air Freight

Based upon respondents' answers to their air freight use, they were next asked if they would use a regularly scheduled flight out of Bisbee-Douglas International Airport. Seven of the ten respondents noted that they would use such a service; three noted a later cut-off time would be more beneficial to their organization, one noted cost as a major factor, and one noted it as an important factor in further economic development of the port.

Knowledge about the Port of Entry redesign as well as the newly formed Douglas International Port Authority is high. The majority of the respondents answered in the affirmative that they were fully aware of plans by the U.S. General Services Administration to redesign the Douglas Port, as well as the recent incorporation of the Port Authority.

Table 17: Answers to Yes or No Questions

Question Number	Yes	No	No answer
11. Would your organization use a regularly scheduled air freight flight?	70%	10%	20%
13. Are you aware of plans to redesign the Douglas Port of Entry by the U.S. Government?	60%	30%	10%
14. Are you aware of the recently formed Douglas International Port Authority?	70%	20%	10%
15. Do you think current plans to update the Douglas Port of Entry will be useful?	80%	10%	10%

4.5. Potential Roles for the Port Authority to Play

Respondents were next given a list and asked to check those roles that they would like the Douglas International Port Authority to play. Respondents could check as many boxes as they felt necessary and could add comments. The question was completed on nine surveys. Among all respondents, all nine agreed that the Port Authority could or should play a role in lobbying on a state level in Sonora, in the development of FAST or SENTRI lanes in Douglas, and in the improvement of wait times for commercial vehicles. Given that respondents marked the current wait times at the port as somewhat adequate/inadequate to adequate/very adequate, the fact that all respondents also chose wait time improvement as a potential port authority role speaks to the

importance of wait times for commercial vehicles all along the U.S.-Mexico border. It may also be due to the visibility of wait time improvement as a major border issue. Respondents noted that better lobbying (at both state and national levels in both Mexico and the United States) will improve infrastructure and attract attention, which is beneficial to all port users. There was near consensus for most forms of road improvement on the Mexican and Arizonan side, as well as for the attraction of funding for further port development from the federal and state government, as has been pursued in Nogales. Three respondents noted that improvements were needed on AZ-Highway 80, while two noted improvements were needed for the U.S.-191. On the Mexican side, three respondents named Highway MX-14 and three respondents named Highway MX-15 as in need of improvement. However, due to the low response rate, a better survey of potential port users and port authority members is needed before any conclusions can be reached.

Table 18: Possible Roles for the Port Authority

	Checked
Lobbying at a national level in Mexico	88%
Lobbying at a national level in the United States	77%
Lobbying at a state (or local) level in Sonora	100%
Lobbying at a state (or local) level in Arizona	88%
Attracting produce companies from Nogales to use Douglas as a reliever port	44%
Developing FAST Lanes or SENTRI lanes	100%
Attracting funding for port development from federal and state governments.	88%
Developing cross-border tourism	66%
Marketing the Douglas Port of Entry in Mexico	77%
Providing warehouse space	44%
Providing forklift services for inspections on the U.S. side	66%
Improving wait times for commercial vehicles	100%
Expediting improvements on roads, bridges, etc. in Douglas and Cochise County.	88%
Expediting improvements on roads, bridges, etc. in Agua Prieta and Sonora.	88%
Attracting funding to improve the highways (either AZ-80 or 90 or US-191) to the I-10 in Arizona.	88%

Attracting funding to improve the highways (MX-14 or MX-15) in Mexico.	77%
Development of a free trade zone	77%

4.6. Conclusion about the Douglas Port Development Questionnaire

The results of the questionnaire suggest interest by local companies in playing a role in port development. Knowledge about local changes, including plans to redesign the port, is high. The majority of respondents (70%) answered in the affirmative that they would use a daily air freight service provided at either of the local airports, while nine respondents were in consensus about three important roles for the Port Authority to play.

However, the survey results represent a convenience sample of who was able to answer the questionnaire. A better, more conclusive study that involves a greater percentage of the business operations in Douglas and Agua Prieta is needed for more conclusive results.

5.0. Development of a Set of Best Practices for the Douglas Port Authority

A set of best practices for the Douglas Port Authority was developed by comparing port authorities and economic development organizations along both the U.S.-Mexico and U.S.-Canada border. Fourteen different organizations were compared in terms of their composition, their goals, and the services they provide.

5.1. Vision for the Douglas International Port Authority

The following was taken from the text of an e-mail from City of Douglas Economic Development Department Director Victor Gonzalez (dated 10/01/2007).

“The general purpose of the port authority shall be to promote trade and commerce and those activities related to the development of trade and commerce toward the goal of making international ports of entry located in the Douglas region the most efficient and effective of the ports located on the U.S./Mexico border. Furthermore, the authority shall be created as a cooperative regional effort of public and private entities in the area of Douglas and Cochise County.

To accomplish its purpose the port authority will engage in one or more of the following:

Initial/On-Going:

- Informational and lobbying efforts directed toward and in partnership with local, state, federal and tribal authorities and organizations in order to obtain financial and policy support from those governments for the authority's activities.
- Expansion and improvement of existing international port of entry facilities along the Arizona-Mexico border in the City of Douglas and Cochise County, Arizona.
- Promotion of international trade and commerce in Douglas, Cochise County, Agua Prieta, and the State of Sonora through the international ports of entry located in Douglas and Cochise County, Arizona.
- Provide forum for Port Users by interacting with Customs and Border Protection, U.S. Department of Transportation, Arizona Department of Transportation, U.S. Department of Agriculture, Food and Drug Administration and others.

Mid/Long-Term:

- Establishing, operating and maintaining a foreign trade zone or expansion zone within Douglas and/or Cochise County, Arizona.
- Improving the flow of transportation, including the development of intermodal facilities in and around Douglas and/or Cochise County.
- Constructing, operating and maintaining an international port of entry along the Arizona-Mexico border in coordination with Federal agencies.”

5.2. Selection of Comparison Organizations

Because Douglas is a truck-based land port, only those ports that had a land-based trucking component were compared. A list of commercial land ports of entry through both the U.S.-Mexico and U.S.-Canada border was obtained through the Customs and Border Protection website (<http://apps.cbp.gov/bwt/>). The Google Search Engine was used to find the websites of either port authorities or economic development organizations for those ports. Some ports did not have any economic development organization listed, or the website was uninformative; therefore, the search was further narrowed to those organizations with enough information for a

reliable comparison of service provided, goals, and organizational structure. Five of the fourteen comparison organizations were focused entirely on the ports of entry (named as either port authorities or just ports), while nine other organizations were economic development organizations or, in two cases, the local chambers of commerce. Ten of the organizations focused on ports along the U.S.-Mexico border, while four organizations focused on the U.S.-Canada border.

The list of organizations included is below, divided by state with year of incorporation; for several organizations, no year of incorporation was apparent. The Rio Grande City Economic Development Corporation and Starr County Industrial Foundation were included together due to their shared goals and close linkages in the economic development of Rio Grande City and Starr County.

- 1) Laredo Development Foundation – 1966 (Texas)
- 2) Port of Brownsville - 1936 (Texas)
- 3) Rio Grande City Economic Development Corporation - 1979 and Starr County Industrial Foundation 2003 (Texas)
- 4) McAllen Economic Development Corporation (Texas)
- 5) New Mexico Border Authority - 2004 (New Mexico)
- 6) Greater Yuma Port Authority – 2000 (Arizona)
- 7) Greater Nogales and Santa Cruz County Port Authority - 2003 (Arizona)
- 8) Calexico Economic Development Commission - 1982 (California)
- 9) San Ysidro Chamber of Commerce - 1979 (California)
- 10) Otay Mesa Chamber of Commerce - 1987 (California)
- 11) Detroit/Wayne County Port Authority – 1978 (Michigan)
- 12) Economic Development Council of Northern Vermont – 1968 (Vermont)
- 13) Economic Development Alliance of St. Clair County- 1952 (Michigan)
- 14) Buffalo/Niagara Enterprise (New York)

5.3 Selection of Terms for Comparison

The fourteen organizations above were compared them according to the short-term and long-term goals and/or services identified by Victor Gonzalez for the Douglas International Port Authority. The focus and composition of each organization was taken from either from a) their

lists of member organizations or b) their mission statements. The stated goals component was taken directly from the mission statement. They were compared according to the following terms:

Focus: Does the organization focus on 1) an entire region, such as a state or a county 2) an entire community or 3) a specific port or ports of entry?

Composition: Is the membership of the organization comprised of 1) people from governmental and other public organizations 2) a mixture of public and private individuals or 3) only private individuals (such as businessmen)?

Stated Goals: The mission statement from each organization and divided it along the following lines in terms of development.

- 1) New business – Marketing to encourage new businesses to move into the area.
- 2) Old business – Retention and development of existing businesses.
- 3) Workforce – Workplace and workforce development.
- 4) Port of Entry - Port development and expansion in their mission statements.

Services

The services listed were developed partially from information provided by Victor Gonzalez and partially from lists of services/future plans/progress within the websites. Additionally, research articles including Notteboom and Winkelmanns (2001), Erie (1999), and Roadway Express, Inc. (1988) were used to develop a list of services and roles port development organizations can play. If the organization listed its achievements, or provided links and further information about a service it either runs or promotes, then it was marked as having provided that service. If a particular service was mentioned once (for instance, transportation projects development or administration) within the website's content, the organization was marked as providing that service. For the Greater Yuma Port Authority and the Greater Nogales/Santa Cruz County Port Authority, information from local sources was used.

- 1) Lobbying either regionally (state or county) or nationally for research funds, port development or expansion funds, and economic development funds was included.
- 2) Development, promotion, and management are three services provided by ports in a variety of areas, including industrial/warehouse parks to attract new business and retain old business, free trade zones to attract international business, new commercial ports of entry to address growing international trade, transportation infrastructure development

and management to address problems such as wait times and inefficient trade flows through the ports, and tourism development to bring added money into the community.

- 3) Additionally, several other terms were included: whether the organization has a research component, whether it provides start-up assistance (monetary or otherwise) to new businesses, and whether it actively markets the port outside of the immediate region.

5.4. Comparison Tables

Table 19
Composition and Stated Development Goals Comparison

	Focus			Composition			Transport Modes			Stated Development Goals			
	Regional	Community	Port	Public	Public/ Private	Private	Air	Rail	Water	New business	Old business	Workforce	Port of Entry
Laredo		X			X		X	X		X	X	X	
Brownsville			X	X			X	X	X				
Rio Grande City	X	X			X					X	X		
McAllen		X		X			X	X		X	X	X	
New Mexico	X		X	X								X	X
Yuma	X		X	X			X	X					X
Nogales	X		X		X			X					X
Calexico		X		X			X	X		X			
San Ysidro		X			X						X		
Otay Mesa		X				X	X			X			X
Detroit			X	X				X	X	X			X
Vermont	X	X		X						X	X	X	
St. Clair	X	X			X					X	X		
Buffalo/ Niagara		X			X					X	X	X	

Source: Websites of organizations listed above, Design: Own Design

**Table 20
Comparison of Services Provided**

Services	Lobbying		Development, Promotion and/or Management of:					POE Research	Start-up assistance	Strategic Marketing of POE
	Regional	National	Industrial/Warehouse Parks	FTZ's	New POE's	Transportation	Tourism			
Laredo	X	X	X	X			X	X	X	X
Brownsville			X	X		X				
Rio Grande City			X	X						X
McAllen			X	X				X	X	
New Mexico										X
Yuma	X	X	X	X	X			X		
Nogales	X	X		X		X	X	X		
Calexico							X			X
San Ysidro	X									
Otay Mesa	X	X				X		X	X	X
Detroit			X	X				X		X
Vermont			X						X	
St. Clair			X	X					X	
Buffalo/ Niagara			X						X	X

Source: Websites of organizations listed above, Design: Own Design

5.5. Best Practices - Short-Term for the Douglas International Port Authority

Problems with the comparisons included differences in the kinds of organizations – at least nine of the fourteen comparison organizations were centered primarily on economic development. Only the Laredo Development Foundation and McAllen Economic Development Corporation have a very active and integral port component, due to their location in major U.S.-Mexico port cities. The Port of Brownsville and the Detroit/Wayne County Port Authority, both publicly owned intermodal centers including land and sea/lake components, were difficult to compare, except in terms of services provided. Assessing the success or failure of an organization was problematic. However, both long-term and short-term goals were developed based on the steps taken by the largest number of organizations, especially those that have been active several decades and successful in achieving both short-term and long-term goals.

Short term goals were identified by comparison of the above organizations, as well as through communications with local government authorities and port authority members and consultants.

1. Website Development - Of the organizations included, nearly all provided an information resource for available warehouse or industrial space, free trade zone information, customs brokers contact information, and community information for new businesses wishing to relocate to the area. In the short term, website development for the Douglas Port, including current trade flows, available industrial park spaces, and an assessment of the port's strengths, would be useful.

2. Information and Lobbying Efforts Statewide - Based upon the successes of both the Greater Yuma and Greater Nogales/Santa Cruz County Port Authorities and in consultation with Marisa Walker and port authority officials and consultants, there is a need for lobbying or information efforts to direct attention to the Douglas Port of Entry, especially as the Eastern branch of the CANAMEX corridor and a reliever port for Nogales.

3. Marketing Plan Development – Better marketing of the Port of Entry remains a goal of the City of Douglas Department of Economic Development. The Port Authority has the ability to raise funds and strategically market the port by either hiring staff or allocating human resources to developing a marketing plan. Douglas has infrastructure available to expand, especially from Sonora and Hermosillo.

Long-term practices were harder to identify, but most of the organizations that have been around for ten or more years have pursued the following.

1. **Free Trade Zone Development** – Nearly all the major ports along both the U.S.-Mexican and U.S.-Canadian border include one or more free trade zones to curb tariff and tax rates and encourage economic development in certain sectors of the economy.
2. **Industrial Park Development, Management, or Promotion** – New industrial parks (or renovation of existing facilities) in either Douglas or Agua Prieta could be developed, assuming that there is adequate demand and investor interest.
3. **Start-up Assistance for New Businesses** – Aside from providing basic information and consulting services for new businesses thinking about either relocating to the area or using the port for international trade, the Port Authority could provide more specialized services, including shelter services, access and matching of companies to industry specialists (customs brokers, accounting firms, and attorneys), and, in some cases, investment funds (from Laredo Development Foundation and McAllen Economic Development Corporation).

6.0. Conclusion

The Port of Entry in Douglas, Arizona, has the capacity for further growth under existing conditions. Adequate numbers of customs officials, a relatively short wait time (when compared to Nogales) and highways on both sides of the border make trade increases for the region feasible. The feasibility study completed by the General Services Administration makes redevelopment of the port a priority. Based on the methodology of the 2002 Statewide Economic Study, Douglas has an adequate telecommunications infrastructure comparable to Nogales and San Luis/Yuma. However, from a preliminary round of interviews conducted in February 2008, the transportation infrastructure of the port and the surrounding area may not be adequate for the needs of current and potential users.

The developing Douglas International Port Authority (per the e-mail from Victor Gonzalez, dated 10/01/2007) would be best served by 1) developing an appropriate website for current and potential port users, governmental and other funding sources, and tourists to refer to for basic information, 2) developing a lobbying and information strategy to promote the port regionally and statewide to attract more funding, more business, and potential investors, and 3) creating a marketing plan emphasizing the value-added services of the Port of Entry to attract better international trade. Redesign of the port may not be as large of an issue, though plans are

underway to relieve traffic congestion between commercial and non-commercial vehicles on the Mexican side. The Port Authority can act as a forum for different governmental agencies and businesses to interact with one another on a formal level; however, given that the goal is to improve trade, the forum may be more of a long-term goal.

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Appendices

- 1. Top 40 imports by HTS code for 2006 and 2007**
- 2. Top 40 exports by SAIC code for 2006 and 2007**
- 3. Attachment #1 – Interview Schedule for Douglas Manufacturers Interviews**
- 4. Douglas Port Development Cover Letter and Questionnaire (in English and Spanish)**
- 5. List of Organizations Approached for Completion of the Questionnaire**

Appendix 1

Information from CBP - Top imports into Douglas - 2006				
Rank	Description	HTS Number	Value	Percentage of Total Trade
1	REFINED COPPER WIRE>6mm=<9.5	7402116000	172,775,853	23.44089572
2	IGNITION WIRE: VEHICLE, SHIP, AIR	8544300000	47,635,494	6.462816581
3	BODY PART, ACCESS:OTH 8701-8705	8708295060	64,106,489	8.6974742
4	ROASTED MOLYBDENUM ORES & CONC	2613100000	42,561,901	5.774470597
5	PLAST, BLINDS (INC. VENETIAN)	3925301000	34,000,578	4.612936296
6	OTH ART ASMB W/US FAB COMPONTS	9802008068	55,105,245	7.476254809
7	REF COPPER: CATHODES/SECTIONS	7403110000	34,096,744	4.625983358
8	UNWROUGHT SILVER BULLION	7106911010	34,016,378	4.615079918
9	OTH LV MLE BV ANM=>90KG<200KG	0102904034	19,209,913	2.606252897
10	ALUM VENETIAN BLINDS& SHUTTERS	7616995040	16,994,127	2.305632135
11	OTHER BLINDS, SHUTTERS, SCREENS	4421904000	15,646,431	2.122787132
12	OT LVE FMLE BVNE ANM 200<320KG	0102904058	18,901,629	2.564427301
13	OTHR US GDS RETURN: OTHR, N/ADV	9801001097	25,415,496	3.448178557
14	OT LVE MLE BVNE ANM 200<320KG	0102904054	13,578,516	1.842228368
15	WINDOWSHDE/BLIND;NOKNIT;SYNFBR	6303922030	10,626,123	1.441670447
16	EVAPORATIVE AIR COOLERS	8479600000	8,675,872	1.177075426
17	GOLD BULLION, NONMONE>99.95%G	7108121013	8,674,487	1.17688752
18	MNTNG ETC, IRN/STL,CRTN,DRP,SHD	8302416050	8,611,766	1.168378019
19	REF COPPER: CATHODES/SECTIONS	7403110000	8,565,526	1.162104532
20	OTH; MDE UP ARTI.INCLD.DRES.PA	6307909889	7,710,406	1.046088443
21	STATORS & ROTORS<18.65, F/8501	8503003500	6,236,719	0.846149952
22	INDUCTORS, OTHER	8504508000	5,542,739	0.751996096
23	US GDS RETRN:840710,840910,ETC	9801001035	4,427,669	0.600711995
24	ENG PTS OTHER, NSPF, FOR AUTOS	8409915080	4,352,364	0.590495193
25	FABRIC(LOOPED PL) MAN-MADE FBR	6001220000	3,989,295	0.54123679
26	GRM 5602-5603: N/WOV DISP HOSPT	6210105000	3,502,083	0.475135622
27	SURGICAL DRAPES, DISPOSABLE	6307906800	3,469,297	0.47068747
28	MOUNTING, ETC, OF IRON ETC, NSPF	8302416080	3,374,929	0.457884348
29	ELECMECH RELAYS OTH, CONT U/10A	8536490050	3,323,401	0.450893426
30	OTH; MDE UP ARTI.INCLD.DRES.PA	6307909889	3,240,803	0.439687166

31	FAB,TEXT,IMP,ETC.,W/OTH,M/M,OT	5903902500	3,131,570	0.424867275
32	BAMBOO,RATTAN OR WOOD ARTICLES	4602104500	2,882,997	0.391142807
33	SEAT BELT:BODY OF 8701-8705	8708210000	3,460,593	0.469506579
34	OTHR ARTCLS T.B.REPAIRD,ALTRD	9813000540	3050408	0.41385584
35	OT LV FMLE BV ANM=>90<200KG	0102904038	3160682	0.428816967
36	ARTIFICIAL BAITS AND FLIES	9507907000	1939885	0.263188641
37	STONE,N SLATE,SETTS,CURB/FLAG	6801000000	1772556	0.240486733
38	POWER SUP>50W,<=150W,PYSCL8471	8504406007	1593839	0.216239788
39	TRANSF OTH, UNRATED, NT 0/1KVA	8504312000	1592150	0.216010637
40	STONE, TRAVERTINE:OTHER	6802912500	1501635	0.20373026

Information from CBP - Top imports into Douglas - 2007				
<u>Rank</u>	<u>Description</u>	<u>HTS Number</u>	<u>Value</u>	<u>Percentage of Total</u>
1	REFINED COPPER WIRE>6MM=<9.5	7408116000	205,567,666	22.58094401
2	REF COPPER:CATHODES/SECTIONS	7403110000	128,338,644	14.09758544
3	ROASTED MOLYBDENUM ORES & CONC	2613100000	66,974,197	7.356899175
4	BODY PART,ACCESS:OTH 8701-8705	8708295060	61,558,409	6.76199236
5	IGNITION WIRE:VEHICLE, SHIP,AIR	8544300000	58,833,717	6.462693746
6	OTH ART ASMB W/US FAB COMPONTS	9802008068	52,822,328	5.802362084
7	UNWROUGHT SILVER BULLION	7106911010	42,922,001	4.714843147
8	PLAST,BLINDS (INCLUDE VENETIAN)	3925301000	35,408,637	3.889524384
9	OTHR US GDS RETURN:OTHR,N/ADV	9801001097	26,670,114	2.929625863
10	OT LVE MLE BVNE ANM 200<320 KG	102904054	22,051,047	2.422236275
11	OTHER BLINDS,SHUTTERS,SCREENS	4421904000	15,779,413	1.733317541
12	ALUM VENETIAN BLINDS & PARTS	7616995040	15,263,450	1.676640673
13	EVAPORATIVE AIR COOLERS	8479600000	12,377,161	1.35959115
14	WINDOWSHDE/BLIND;NOKNIT;SYNFBR	6303922030	11,559,649	1.269790098
15	GOLD BULLION,NONMONE,>99.95%G	7108121013	11,064,107	1.215356411
16	OTH; MDE UP ARTI.INCLD.DRES.PA	6307909889	10,695,654	1.174883039
17	OTHR MOLYBDENUM ORES & CONC	2613900000	10,668,089	1.171855113
18	OTH LV MLE BV ANM=>90KG<200KG	0102904034	10,373,273	1.139470527

19	OT LVE FLME BVNE ANM 200<320KG	0102904058	8,218,999	0.902830488
20	MNTNG ETC, IRN/STL, CRTN,DRP,SHD	8302416050	7,263,208	0.797839934
21	STATORS & ROTORS,18.65, F/8501	8503003500	6,210,034	0.682152173
22	FAB,TEXT,IMP,ETC.W/OTH,M/M,OT	5903902500	4470500	0.491069983
23	ENG PRTS OTHER,NSPF,FOR AUTOS	8409915080	4,322,875	0.474853853
24	ELECTRIC CONDUCTOR:OTHER NSPF	8544499000	3,979,201	0.437102375
25	FABRIC(LOOPED PL) MAN-MADE FBR	6001220000	3,287,171	0.361085115
26	INDUCTORS, OTHER	8504508000	3,044,018	0.334375543
27	SURGICAL DRAPES, DISPOSABLE	6307906800	2,974,679	0.326758878
28	SEAT BELT: BODY OF 8701-8705	8708210000	2,860,716	0.314240411
29	MOUNTING ETC, OF IRON ETC, NSPF	8302416080	2,589,918	0.284494125
30	BAMBOO, RATTAN OR WOOD ARTICLES	4602114500	2,374,025	0.260778977
31	US GDS RETRN:840710,840910,ETC.	9801001035	2,353,251	0.25849702
32	OTHER PARTS F/EQU IN8535,36,37	8538908080	2,279,151	0.250357374
33	PROF BOOKS,ETC.,RETURNED TO US	9801008500	2,119,705	0.232842746
34	OTHR ARTCLS T.B. REPAIRD,ALTRD	9813000540	2,098,549	0.230518828
35	OTHER PLASTIC MAT;OTH,OTHER	3926909980	2,084,195	0.228942088
36	GRM 5602-5603:N/WOV DISP HOSPT	6210105000	2,074,049	0.227827582
37	ELECMECH RELAYS OTH,CONT U/10A	8536490050	1,948,618	0.214049392
38	OTH ELECTRIC HEATING RESISTORS	8516808000	1,821,951	0.200135431
39	STAT ROTOR,=>18.65,NOT AIRCFT	8503006500	1,723,604	0.189332331
40	MACHINERY PTS OF CONVEY/ELEV	8431390010	1,693,986	0.18607889

Appendix 2

From Texas Center for Border Economic and Enterprise Development website

Jan.-Dec. 2006

Jan.-Dec. 2007

U.S. IMPORTS FROM MEXICO

U.S. IMPORTS FROM MEXICO

<u>RANK</u>	<u>SITC</u>	<u>PRODUCT DESCRIPTION</u>	<u>TRADE VALUE</u>	<u>RANK</u>	<u>SITC</u>	<u>PRODUCT DESCRIPTION</u>	<u>TRADE VALUE</u>
1	68241	Refined Copper Wire	172,775,853	1	68241	Refined Copper Wire	186,614,090
2	78432	Other Parts And Accessories Of Motor Vehicle Bodies Of Headings 8701 To 8705 (Including Cabs)	103,793,517	2	68212	Refined Copper	128,338,644
3	00119	Bovine Animals, Other Than Purebred Breeding Animals, Live	54,841,917	3	78432	Other Parts And Accessories Of Motor Vehicle Bodies Of Headings 8701 To 8705 (Including Cabs)	86,758,504
4	77313	Ignition Wiring Sets And Other Wiring Sets Of A Kind Used In Vehicles, Aircraft Or Ships	47,596,107	4	28781	Molybdenum Ores And Concentrates, Roasted	53,713,262
5	28781	Molybdenum Ores And Concentrates, Roasted	42,561,901	5	77313	Ignition Wiring Sets And Other Wiring Sets Of A Kind Used In Vehicles, Aircraft Or Ships	49,753,396
6	68212	Refined Copper	34,096,744	6	68113	Silver (Including Gold And Platinum Plated Silver), Unwrought	36,938,014
7	68,113	Silver (Including Gold And Platinum Plated Silver), Unwrought	34,016,378	7	00119	Bovine Animals, Other Than Purebred Breeding Animals, Live	27,522,968
8	93100	Special Transactions And Commodities Not Classified According To Kind	29,273,027	8	89329	Builders' Ware Of Plastics, N.E.S.	26,700,100
9	89329	Builders' Ware Of Plastics, N.E.S.	25,497,460	9	93100	Special Transactions And Commodities Not Classified According To Kind	22,128,613
10	69979	Articles Of Aluminum, N.E.S.	16,855,439	10	69979	Articles Of Aluminum, N.E.S.	12,735,737

11	65893	Life Jackets And Life Belts And Other Made-Up Articles, N.E.S., Of Textile Materials	15,267,649	11	72849	Machinery Having Individual Functions, N.E.S.	11,989,605
12	63599	Manufactured Articles Of Wood, N.E.S.	15,070,440	12	65893	Life Jackets And Life Belts And Other Made-Up Articles, N.E.S., Of Textile Materials	11,982,316
13	69916	Mountings, Fittings And Similar Articles For Buildings, N.E.S., Of Base Metal	11,401,790	13	63599	Manufactured Articles Of Wood, N.E.S.	11,837,668
14	65851	Curtains (Including Drapes) And Interior Blinds Or Roller Shades Of Textile Materials; Curtain Or Bed Valences Of Textile Materials	10,607,947	14	28782	Molybdenum Ores And Concentrates, Other Than Roasted	10,668,089
15	77125	Electrical Inductors, N.E.S.	8,789,681	15	65851	Curtains (Including Drapes) And Interior Blinds Or Roller Shades Of Textile Materials; Curtain Or Bed Valences Of Textile Materials	9,873,103
16	72849	Machinery Having Individual Functions, N.E.S.	8,675,872	16	97101	Gold (Including Gold Plated With Platinum), Nonmonetary, Unwrought Or In Semimanufactured Forms Or In Powder Form	9,785,226
17	97101	Gold (Including Gold Plated With Platinum), Nonmonetary, Unwrought Or In Semimanufactured Forms Or In Powder Form	8,674,487	17	71690	Parts N.E.S. For Use Solely Or Principally With Electric Motors, Electric Generators, Electric Generating Sets And Rotary Converters	8,712,882
18	71690	Parts N.E.S. For Use Solely Or Principally With Electric Motors, Electric Generators, Electric Generating Sets And Rotary Converters	8,350,621	18	69916	Mountings, Fittings And Similar Articles For Buildings, N.E.S., Of Base Metal	7,923,404
19	77282	Parts Of Electrical Apparatus For Switching Or Protecting Electrical Circuits For Making Connections To Or In Electrical Circuits, N.E.S.	5,466,846	19	77282	Parts Of Electrical Apparatus For Switching Or Protecting Electrical Circuits For Making Connections To Or In Electrical Circuits, N.E.S.	4,618,453
20	77254	Relays For Electrical Apparatus Used With Electrical Circuits Not Exceeding 1,000 Volts	4,969,359	20	77125	Electrical Inductors, N.E.S.	3,921,167
21	84521	Garments Made Up Of Felt Or Other Nonwoven Textile Fabrics, Whether Or Not Impregnated, Coated, Covered Or Laminated	4,748,400	21	65732	Textile Fabrics Impregnated, Coated, Covered Or Laminated With Plastics, Other Than Tire Cord Fabric	3,803,641
22	71391	Parts, N.E.S, Suitable For Use Solely Or Principally With Spark-Ignition Internal Combustion Piston Engines	4,349,755	22	71391	Parts, N.E.S, Suitable For Use Solely Or Principally With Spark-Ignition Internal Combustion Piston Engines	3,381,856

23	65512	Knitted Or Crocheted Looped Pile Fabrics	3,984,140	23	77254	Relays For Electrical Apparatus Used With Electrical Circuits Not Exceeding 1,000 Volts	3,072,581
24	77119	Electric Transformers, N.E.S.	3,621,345	24	65512	Knitted Or Crocheted Looped Pile Fabrics	2,888,717
25	65732	Textile Fabrics Impregnated, Coated, Covered Or Laminated With Plastics, Other Than Tire Cord Fabric	3,130,478	25	84521	Garments Made Up Of Felt Or Other Nonwoven Textile Fabrics, Whether Or Not Impregnated, Coated, Covered Or Laminated	2,459,487

Appendix 3

**ATTACHMENT # 1 TO APPLICATION FOR THE CONDUCT OF RESEARCH
INVOLVING HUMAN SUBJECTS ARIZONA STATE UNIVERSITY INSTITUTIONAL
REVIEW BOARD (IRB)**

STUDENT NAME: Kimberly Hill

FACULTY SUPERVISOR: Arnold Maltz, Ph.D.

TOPIC OF RESEARCH: Douglas Manufacturers Interviews

INTERVIEW SCHEDULE: 15-20 interviews with maquila plant managers from Douglas, Arizona

Interview questions and probes:

1. Could you tell me a little about your background here in Douglas-Agua Prieta? For instance, how long have you lived in the area? Which plant do you work for and what do you produce? If you're not associated with a plant, what kinds of services do you provide in the Douglas-Agua Prieta area?
2. Is the Douglas Port of Entry your primary method of shipping goods, or do you use other ports to conduct business?
3. About how often do you move goods? For instance, about how many trucks per day or per week do you use?
4. Do you use trucks to ship goods and parts in and out? How often do you use trucks?
5. How often do you use other modes, such as air freight? If so, how often do you use them and where do you go to use them?
6. Could you tell me where you usually ship goods from (for instance, you receive raw materials from Chihuahua and assemble them in Agua Prieta)?
7. Where do you usually move goods to when you import to or export from the United States (for instance, a region of the country or a state)?
8. Do you ship to any other destinations besides the United States? How?
9. A major reason for this interview is to determine what you feel are the biggest needs for the future development of the port. Given your knowledge of the Port Authority that is being formed, what do you think are the biggest needs for the Douglas Port that the members of the Port Authority could deal with?
10. What do you think are the most valuable services it could provide? I can provide a paper and pen and a few minutes to consider.
11. A major part of my report deals with the possibility to open up Bisbee-Douglas International Airport to air freight. Do you currently use the Bisbee-Douglas Airport for any reason? Or do you use other airports or resources instead?
12. For your business, would an airport expansion or an increase in services be useful? For instance, if there were a twice a week flight for goods and people, would you use it? Why or why not?
13. Or do you think something else is more useful?

Douglas Manufacturers Interviews

February 14-15, 2008

Dear _____:

I am an undergraduate student under the director of Professor Arnold Maltz in the Department of Supply Chain Management at Arizona State University. I am conducting a research study on the Port Authority in Douglas, Arizona. I am working with Victor Gonzalez, Director of Economic Development for the City of Douglas, to find out ways in which the Port Authority and the Office of Economic Development could further develop the port. As part of this research, we are asking representatives of manufacturers currently using the port how it could be improved.

I am inviting your participation in a private interview, which will involve answering some questions that I have prepared concerning how the port is currently being used and the ways in which you would like to see it being used. The interview may take up to an hour of your time. You have the right not to answer any question, and to stop the interview at any time or request any part of the interview not be transcribed.

Your participation in this study is voluntary. If you choose not to participate or to withdraw at anytime there will be no penalty in any way, shape, or form.

I will be taping our conversation and the audio recording will be stored by me for a period of less than a year, then it will be erased. All digital copies of the tapes will be stored on a secure server and locked, only accessible to the primary and co-investigators. I need these recording for research purposes but they will be stored in a secure location and your identity will be held in confidence. The results of this study may be used in reports, presentations, or publications but your name will not be used. Any identifying information will be removed.

The direct benefit to you is to give feedback on the development of the Port Authority and what you feel are the most pressing issues the Office of Economic Development could potentially deal with to encourage further development of the port. You will be able to access the results of this interview. The results may be used to make decisions on the further development of the port.

Should you have any questions or concerns, please contact the co-investigator, Kimberly Hill, at kmhill@asu.edu or 480-323-9807. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Research Compliance Office, at (480) 965-6788.

DOWNTOWN PHOENIX CAMPUS

Appendix 4

Victor Gonzalez
Economic Development Director, City of Douglas
425 10th Street
Douglas, AZ 85607
(520) 805-4047

Kimberly Hill
Project Facilitator, Douglas Port Development Project
Intern, ASU for Arizona, Office of Public Affairs, Arizona State University
PO Box 877305
Tempe AZ 85287-7305
(480)323-9807

To Whom It May Concern:

Thank you for agreeing to complete this 3-page questionnaire in support of the City of Douglas Department of Economic Development and the Douglas Port Authority. The questionnaire is being distributed to gather information about trade flows through the Douglas region, the concerns of Douglas Port of Entry commercial users, and how these concerns can be addressed. The project is being administered by ASU for Arizona under the Office of Public Affairs at Arizona State University with faculty from the W.P. Carey School of Business and the School of Urban Planning. By completing it, you will help us to understand how to make the Douglas Port of Entry more efficient and effective. Future uses of the information collected include the development of marketing plans to make the Douglas port even better.

You can fill out the form online at www.asu.edu/asuforaz and click on the sidebar “Projects,” “Douglas Port of Entry,” and then “Go to Questionnaire.” All responses will be e-mailed to Kimberly Hill, kmhill@asu.edu. Alternatively, the questionnaire in either English or Spanish can be downloaded and submitted 1) as an e-mail attachment to Kimberly Hill – kmhill@asu.edu, 2) by mail to Kimberly Hill, Project Facilitator, ASU for Arizona, Building Great Communities, Arizona State University, PO Box 877305, Tempe AZ 85287-7305.

If you any questions, please contact either Victor Gonzalez at 520-805-4047, or Kimberly Hill, Project Facilitator, at 480-323-9807.

Thank you,



Victor Gonzalez
Economic Development Director
City of Douglas, Arizona



Kimberly Hill
Project Facilitator
ASU for Arizona

Office of Public Affairs

Building Great Communities

ASU Downtown Center

541 E. Van Buren Street, Suite B5, Phoenix, AZ 85004

(602) 496-1345

Douglas Port of Entry Development Questionnaire

We are investigating attitudes toward port development and intermodal use – specifically air freight between the Douglas Port of Entry and Bisbee-Douglas International Airport or Douglas Municipal Airport using a survey from local manufacturers and producers most likely to be affected. Your response sheet is identified with a form number and a business name; however, all responses will be kept confidential. You may round and/or estimate your answers. Thank you for your assistance with this project.

<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">FORM 1</td> </tr> </table>	FORM 1
FORM 1	

1. The word operation refers to any organization or division of an organization that operates near or in Douglas, Arizona-Agua Prieta Sonora and uses the Douglas Port of Entry into and out of the United States.
2. Could you give the name and briefly describe the nature of your operation (i.e. auto parts assembly plant)?

3. If available, can you provide the Standard Industrial Classification (SIC) or NAIC (North American Industrial Classification) code for your operation?

4. Where is your operation (maquiladora, company, etc.) physically located?
 - Douglas Agua Prieta Northern Sonora -Which city, town, or area? _____
 - Northern Chihuahua-Which city, town, or area? _____
 - Other (please explain): _____

5. If known, please list the location of the top three suppliers of material or assembly components for your operation (Note: This only applies to operations that primarily use the Douglas POE rather than entire corporations).

1. _____
2. _____
3. _____

6. Please indicate the major commodities produced by your operation that pass through the Douglas/Agua Prieta Border. Origin is where the product is assembled or manufactured (for instance, if you have multiple operations that use the port). Destination is defined as where you send your product (not necessarily where it is sold commercially or as retail). If you need more room, you may write on the back of this page.

COMMODITY (# from List below or description)	ORIGIN (see city/region list below)	DESTINATION (see city/region list below)	ANNUAL TONNAGE	US DOLLAR VALUE
1				
2				
3				
4				
5				
6				

Other: Please describe _____

COMMODITY LIST	CITY/REGION LIST (FOR ORIGIN AND DESTINATION)		
1 Live animals (cattle)	1.0 Mexico	2.0 Arizona	10.0 International
2. Live Animals (other)	1.1 Agua Prieta	2.1 Tucson area	10.1 Europe
2 Metals (copper)	1.2 Northern Sonora	2.2 Phoenix area	10.2 Middle East
3. Other metals & minerals	1.3 Southern Sonora	2.3 Douglas area	10.3 East Asia
4 Electronics	1.4 Northern Chihuahua	2.4 Other Arizona	10.4 South America
5 Automobile parts & accessories	1.5 Southern Chihuahua	3.0 Southwest	10.5 Africa
6 Textiles	1.6 Hermosillo	4.0 Southeast	10.6 Australia and SE Asia
7 Other (Please describe)	1.7 Mexico (Other)	5.0 Northwest	10.7 Other
		6.0 Midwest	
		7.0 East Coast	
		8.0 Gulf of Mexico	
		9.0 Mountain West	

7. How many persons do you employ?
8. Are they employed in: Assembly Fabrication Extraction Other: _____
9. How often does your organization use air freight to ship products, important documents, etc. (using FedEx, UPS, or DHL)?
Several times/day Once/day 1-2 times/week 1-2 times/month Never
10. In reference to the question above, approximately what is the approximate weight that you ship by air:
 Per day? _____ Per week? _____ Per month? _____
11. If a regularly scheduled freight flight were set up at Bisbee-Douglas International Airport or the Douglas Municipal Airport that left at 5:00 PM for a hub airport (Tucson or Phoenix) would your company use it?
 Yes No
 Why or why not? _____
12. Please rate the port and the surrounding infrastructure in the following areas by circling your answer from 1 to 6:

Communication/representation of the Port of Entry and port users with federal officials and departments (in the United States)	1-Very Inadequate	2-Somewhat Inadequate	3-Inadequate	4-Somewhat Adequate	5-Adequate	6-Very Adequate
Communication/representation of the Port of Entry and port users with federal officials and departments (in Mexico)	1-Very Inadequate	2-Somewhat Inadequate	3-Inadequate	4-Somewhat Adequate	5-Adequate	6-Very Adequate
Communication/representation of the Port of Entry and port users with Arizona state officials and departments	1-Very Inadequate	2-Somewhat Inadequate	3-Inadequate	4-Somewhat Adequate	5-Adequate	6-Very Adequate

<p>Communication/representation of the Port of Entry and port users with Sonora state officials and departments</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Communication between the Port of Entry, port users, and government officials at a local level (within Douglas and Agua Prieta)</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Wait times at the Douglas Port of Entry</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Freight & warehouse services available in Douglas, Arizona</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Transportation Infrastructure in Mexico - along MX-14 or MX-15</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Transportation Infrastructure in Arizona – along AZ Highway 80 or 90 or U.S. Highway 191</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>
<p>Current physical design of the Douglas Commercial Port of Entry</p> <p>1-Very Inadequate 2-Somewhat Inadequate 3-Inadequate 4-Somewhat Adequate 5-Adequate 6-Very Adequate</p>

13. Are you aware of plans to redesign the Douglas Port of Entry by the U.S. Government? Yes No

14. Are you aware of the recently formed Douglas International Port Authority? Yes No

15. Do you think current plans to update the Douglas Port of Entry will be useful? Yes No Don't know
Why or why not?

16. What roles do you want the Port Authority/Department of Economic Development to fulfill?

- Lobbying at a national level in Mexico. For what reason? _____
- Lobbying at a national level in the United States. For what reason? _____
- Lobbying at a state (or local) level in Sonora. For what reason? _____
- Lobbying at a state (or local) level in Arizona. For what reason? _____
- Attracting produce companies from Nogales to use Douglas as a reliever port.
- Developing FAST Lanes or SENTRI lanes.
- Attracting funding for port development from federal and state governments.
- Developing cross-border tourism.
- Marketing the Douglas Port of Entry in Mexico.
- Providing warehouse space.
- Providing forklift services for inspections on the U.S. side.
- Improving wait times for commercial vehicles.
- Expediting improvements on roads, bridges, etc. in Douglas and Cochise County.
- Expediting improvements on roads, bridges, etc. in Agua Prieta and Sonora.
- Attracting funding to improve the highways (either AZ-80 or 90 or US-191) to the I-10 in Arizona. For which highways? AZ-80 AZ-90 US-191
- Attracting funding to improve the highways (MX-14 or MX-15) in Mexico. For which highway? MX-14 MX-15
- Development of a free trade zone – Do you know what a free trade zone is? Yes No
- Other. Please explain. _____

17. Do you have any other comments, concerns or questions that you would like to share?

Thank you for your time, your information, and your opinions.

Please contact Victor Gonzalez, Economic Development Director, at 520-805-4047, victor.gonzalez@douglasaz.gov, or Kimberly Hill, Intern, ASU for Arizona, at 602-496-1346, kmhill@asu.edu with any further questions.

DOWNTOWN PHOENIX CAMPUS

Victor Gonzalez
Director de Desarrollo Económico, Ciudad de Douglas
425 10th Street
Douglas, AZ 85607
(520) 805-4047

Kimberly Hill c/o Barbara Shaw-Snyder
Project Facilitator
Douglas Port Development Project
ASU for Arizona
PO Box 877305
Tempe AZ 85287-7305
(480)-323-9807

A Quien Corresponda:

Gracias por acceder a responder este cuestionario en apoyo al Departamento de Desarrollo Económico de la ciudad de Douglas y las Autoridades del Puerto de Cruce Fronterizo. Este cuestionario esta siendo distribuido con el propósito de obtener información acerca de los flujos de comercialización de la región de Douglas, y asuntos correspondientes a los usuarios comerciales del puerto de entrada. El proyecto esta siendo administrado por ASU para Arizona bajo la Oficina de Asuntos Públicos en la Universidad Estatal de Arizona con facultad de la Escuela de Negocios W.P. Carey y la Escuela de Planeación Urbana. Al completar este cuestionario, nos ayudara a entender de que manera hacer que el puerto de entrada de Douglas sea mas eficiente y efectivo. La información colectada será utilizada en el futuro para desarrollar planes de mercadotecnia que ayudaran a que este puerto sea aun mejor.

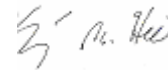
Puede enviar este cuestionario a el Ayuntamiento de Douglas, 425 10th street Douglas Az, 85607 o enviarlo como documento adjunto a Kimberly Hill – kmhill@asu.edu, por fax a 602-496-1359 Attn: Kimberly Hill o 520-364-6304 Attn: Ana Rivera.

Para cualquier duda o aclaración favor de comunicarse con Víctor González al 520-805-4047, Kimberly Hill, Project Facilitator, al 602-496-1346 o Ana Rivera al 520-364-2478.

Gracias,



Victor Gonzalez
Director de Desarrollo Económico
City of Douglas, Arizona



Kimberly Hill
Project Facilitator
ASU for Arizona

Questionario Desarrollo del Puerto de Entrada de Douglas

Estamos haciendo una investigación acerca de la actitud hacia el desarrollo del Nuevo Puerto de entrada entre los productores locales y productores que se podrían ver mas afectados por este cambio, específicamente del flete aéreo entre el Puerto de Entrada de Douglas y el Aeropuerto Internacional de Bisbee-Douglas o el aeropuerto internacional de Douglas . Su hoja de respuestas será identificada con un número de forma y el nombre de su negocio, sin embargo todas las respuestas serán confidenciales. Puede redondear o hacer un estimado en cualquiera de sus respuestas. Gracias por su asistencia con este proyecto.

<table border="1" style="width: 80%; margin: auto;"> <tr> <td style="padding: 5px;">FORM 1</td> </tr> </table>	FORM 1
FORM 1	

1. La palabra operación se refiere a cualquier organización o división de una organización que opera cerca de Douglas Arizona-Agua Prieta Sonora y utilice el Puerto de entrada para entrar y salir del estado.
2. Puede dar el nombre y dar una corta descripción de la naturaleza de su operación (ejemplo; planta de ensamblaje de auto partes)?

3. Si es posible, podría proveernos el código de la clasificación industrial (Standard Industrial Classification -SIC) o la Clasificación Industrial de Norte America NAIC (North American Industrial Classification) de su operación?

4. Donde esta ubicada su operación (maquiladora, compañía, etc.)?
 - Douglas Agua Prieta Norte de Sonora –Ciudad, pueblo o área? _____
 - Norte de Chihuahua- Ciudad, pueblo o área? _____
 - Otro (por favor especifique): _____

5. Por favor enliste los principales tres proveedores de materiales o componentes de ensamblaje para su operación (Nota: esto aplica solamente a operaciones que utilizan primariamente el Puerto de entrada de Douglas más que a corporaciones enteras.

1. _____
2. _____
3. _____

6. Por favor indique los bienes mayores producidos por su operación que crucen la frontera Douglas/Agua Prieta. Origen, se refiere a donde los productos son ensamblados o manufacturados (por ejemplo, si tiene múltiples operaciones que utilicen el puerto) Destinación, se define al lugar donde se envía el producto (no necesariamente a donde es vendido comercialmente o al por menor) Si necesita mas espacio, puede escribir en la parte trasera de la hoja.

COMMODITY (# de la lista o descripción en la parte de abajo)	ORIGEN (ver ciudad/región en la parte de abajo)	DESTINACION (ver ciudad/región en la parte de abajo)	TONELAJE ANUAL	VALOR EN MONEDA AMERICANA
1				
2				
3				
4				
5				
6				

Otro: Por favor describe _____

LISTA DE BIENES	CIUDAD/REGION (PARA ORIGEN Y DESTINACION)		
1 Animales vivos (Ganado)	1.0 México	2.0 Arizona	10.0 Internacional
2. Animales vivos (otros)	1.1 Agua Prieta	2.1 Area de Tucson	10.1 Europa
2 Metales (cobre)	1.2 Norte de Sonora	2.2 Area de Phoenix	10.2 Este central
3. Otros metales y materiales	1.3 Sur de Sonora	2.3 Area de Douglas	10.3 Este de Asia
4 Electrónicos	1.4 Norte de Chihuahua	2.4 Otro lugar en Arizona	10.4 Sudamérica
5 Partes de automóvil y accesorios	1.5 Sur de Chihuahua	3.0 Sureste	10.5 África
6 Textiles	1.6 Hermosillo	4.0 Suroeste	10.6 Australia y sureste de Asia
7 Otro (Por favor especifique)	1.7 México (Otro)	5.0 Noroeste	10.7 Otro
		6.0 Central	
		7.0 Costa este	
		8.0 Golfo de México	
		9.0 Mountain West	

7. Cuantas personas emplea?

8. Están empleados en: Ensamblaje Fabricación Extracción Otro: _____

9. Con que frecuencia su organización utiliza el flete aéreo para enviar productos, documentos importantes etc. (utilizando ya sea FedEx, UPS, o DHL)?
Varias veces / diarias Una vez/diaria 1-2 veces a la semana 1-2 veces mensuales
Nunca

10. En referencia a la pregunta de arriba, aproximadamente cual es el peso de sus envíos aéreos:
 Por día? _____ Por semana? _____ Por mes? _____

11. Si se hiciera un flete aéreo con un horario regular en que cada día salga del aeropuerto Internacional Bisbee-Douglas o el aeropuerto Municipal de Douglas a las 5:00P.M. a un aeropuerto ya sea en Tucson o Phoenix cree que este servicio podría ser utilizado por su compañía? Si
 No
 Por que si o por que no?

12. Por favor califique el Puerto y la infraestructura alrededor en las siguientes áreas (circule su respuesta del 1 al 6)

Comunicación/representación del Puerto de Entrada y usuarios del Puerto con oficiales federales y departamentos (en los Estados Unidos)	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Comunicación/representación de el Puerto de Entrada y los usuarios del Puerto con oficiales federales t departamentos (en México)	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Comunicación/representación del Puerto de Entrada y usuarios de Puerto con oficiales del estado de Arizona y departamentos.	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Comunicación/representación del Puerto de Entrada y usuarios del Puerto con oficiales del estado de Sonora y departamentos	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Comunicación entre el Puerto de Entrada, usuarios del puerto y oficiales del gobierno a nivel local (entre Douglas y Agua Prieta)	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Tiempos de espera en el Puerto de Entrada de Douglas	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Flete y servicios de almacenaje en Douglas, Arizona	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
La Infraestructura del transporte en México – a lo largo de MX-14 o MX-15	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
La Infraestructura del transporte en Arizona – a lo largo de la carretera 80 en Arizona o 90 o U.S. 191	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado
Diseño físico actual del Puerto de Entrada comercial de Douglas	1-Muy Inadecuado	2-Algo Inadecuado	3-Inadecuado	4-Algo Adecuado	5-Adecuado	6-Muy Adecuado

13. Esta al tanto de los planes de re-diseño que el Gobierno de los Estados Unidos tiene para el Puerto de Entrada de Douglas? si No

14. Esta al tanto de la recién formada Autoridad Portuaria y lo que esta hace? Si No

15. Cree que los planes actuales de renovación del Puerto de Entrada serán útiles? Si No No se
Por que si o por que no?

16. Que rol quiere que cumplan las Autoridades Portuarias y el Departamento de Desarrollo Económico?

- Empujar a nivel nacional en México. Por cual razón? _____
- Empujar a nivel nacional en los Estados Unidos. Por cual razón? _____
- Empujar a nivel estatal (o local) en Sonora. Por cual razón? _____
- Empujar a nivel estatal (o local) en Arizona. Por cual razón? _____
- Atraer a compañías de Nogales a utilizar Douglas como un puerto de apoyo
- Desarrollar líneas rápidas (FAST Lanes) o líneas SENTRI.
- Atraer fondos gubernamentales estatales y federales para el desarrollo del puerto.
- Desarrollo de Turismo en la frontera.
- Promocionar el Puerto de Entrada de Douglas en México.
- Proveer espacio de almacenaje.
- Proveer servicios de forklift para inspecciones en el lado Estadounidense.
- Mejorar el tiempo de espera para vehículos comerciales.
- Facilitar las mejoras en caminos, puentes, etc. en Douglas y el condado Cochise.
- Facilitar las mejoras en caminos, puentes, etc. en Agua Prieta y el estado de Sonora.

- Atraer fondos para la mejora de carreteras (ya sea AZ-80 o 90 o US-191) hacia I-10 en Arizona. Para que carreteras le gustaría que fueran destinados estos fondos? AZ-80 AZ-90 US-191
- Atraer fondos para mejorar las carreteras (MX-14 o MX-15) en México. Para que carreteras le gustaría fueran destinados estos fondos? MX-14 MX-15
- Desarrollar una zona de libre comercio – Sabe usted que es una zona de libre comercio? Si No
- Otro. Por favor especifique.

17. Tiene algún otro comentario, preocupación o pregunta que le gustaría compartir?

Gracias por su tiempo, su información y su opinión.

Si tiene cualquier otra pregunta por favor contacte a Victor Gonzalez, Director de Desarrollo Economico, al 520-805-4047, victor.gonzalez@douglasaz.gov, o Kimberly Hill, Interna, ASU para Arizona, al 602-496-1346, kmhill@asu.edu.

Appendix 5 – List of Organizations Approached for Completion of the Questionnaire

CVG-Commercial Vehicle Group
Dix-Mex
Grupo Aduanal Ibarrola Elias
Levolor-Kirsch Window Fashions
Manufactures y Ensamblés Fernandez
OSVIL, LLC
Precept Medical
Takata
Velcromex
Windtech Inc.
Circuit Workers Corporation Mexico S.A. de CV
Adobeair, S. De R.L. de C.V.
Cordova's Maquilas, S.A. de C.V.
Corte, S.A.
Endi-Mex, S.A. de C.V.
Fibras y Mangos del Norte, S. De R.L. de C.V.
Gist Silversmiths de Sonora, S.A. de C.V.
Goleta Coil, S.A. de C.V.
IGB Automotriz, S.A. de C.V.
Industrias Apson, S.A. de C.V.
MWC de Mexico, S. de R.L. de C.V.
North Vernon Forge Mexicana S.A. de C.V.
PK Direct Electronic Outsource, S.A. de C.V.
Promociones Cumplidas de Mexico, S.A. de C.V.
R.K. Electronica, S.A. de C.V.
SI de Mexico, S.A. de C.V. (Standex)
Vem-Mex S.A. de C.V.