

An e-El Paso Initiative Plan

Leveraging the Internet for a vibrant and economically prosperous borderplex

Abstract

El Paso and Cd. Juárez currently sit on the crossroads of economic prosperity in the gold rush of the 21st century. The Internet has created a mechanism whereby the borderplex can become the next "Silicon Valley" of the world's e-commerce rush. With the inherent infrastructure in labor and resources the border region offers, the establishment of e-commerce development and implementation will benefit the region for decades to come. By implementing this initiative as a team, both El Paso and Cd. Juárez would lead the way to global e-trading.

This white paper presents a preliminary concept of how the communities can leverage the Internet as a tool for economic prosperity of the border region, specifically El Paso, Texas and Cd. Juárez, Chihuahua, México.

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Introduction

El Paso and Cd. Juárez find themselves in a unique crossroads that allows them to benefit from the Internet if they were to actively implement a regional plan focusing on the resources each community has to offer. The borderplex could become the next “silicon valley” for the world e-rush. The metroplex has the current resources to lead the way in servicing future E-Commerce and Business-to-Business Commerce (B to B) services for small businesses and large companies alike.

In order to accomplish this, the metroplex should focus on developing existing support infrastructure for future use instead of trying to compete in the Internet Service Provider Market (ISP). As defined here, the ISP is a provider of connections to the Internet. The requirements for this type of service, high economic investment and advanced technology are too expensive for an El Paso based company. Any company attempting to enter this market would be quickly overwhelmed by established telecoms, such as AT&T and Sprint. *(Fast Internet access connections are currently available but not in use. The last few years have seen the laying of vast Fiber Optics networks that remain largely unused. The networks are ready to be placed into use, but local communities and companies have not invested in tying into this vast network. It's like having miles of railroad lines without having stations for trains to stop at and load and unload cargo and passengers.)*

Instead of competing against established telecom, our metroplex should instead focus on support services for the emerging E-Com industry. These services encompass but are not limited to: (The neat part of this is that each market segment will create sub-services that can be provided by smaller local companies. One example is the advertising agencies would need graphics artists and translators)

Who will benefit?

As with any initiative the question of who will benefit is the most important one that needs to be addressed in order that the communities that will benefit from this initiative are to be convinced of the need to support the initiative. All worthwhile initiatives have inherent costs and sacrifices built into them with the only distinction between the truly good ones and the bad ones being; “does the outcome outweigh the costs?” Before we can answer this question, we need to look at the possible benefits the initiative offers. No initiative can predict the actual outcome of the project but the project can detail possible benefits to those affected. Implementation of the El Paso Plan should benefit the following economic segments of the communities.

Current and Future e-Centers

There are currently two schools of thought when it comes to the so-called “call centers” operating out of El Paso. One point of view tends to be that the community needs an economic sector that pays higher wages, provides for employee benefits and is not so dependant on cheap labor to progress. If we are to accept this premise as being the benchmark by what this community, El Paso and Cd. Juárez need in order to prosper then we neglect to take into account the community's greatest asset, a trainable workforce ready and willing to work. The issue of employee benefits and wages tend to be addressed once the population becomes a prosperous and vibrant community. In a depressed economy, employees tend to be discarded resources that can easily be filled by a cheap and abundant supply. On the other hand, in a vibrant, active community, the labor force becomes a commodity that forces the employer to cater to the labor force, in order to maintain production levels. Cd. Juárez, Chihuahua is a perfect example of this

theory. In the 1980's through the 1990's, the Juárez labor force was a commodity that was fought over by the Maquila industry. In order to maintain adequate staffing levels for production, Maquila operators were forced to provide labor incentives to the workforce in the form of education, monetary incentives and quality of life benefits. This produced a workforce that not only is better educated but also demands a higher wage thus pricing them out of the cheap labor market. This is best exemplified in the Maquila industry's movement of entry-level production to countries such as China where wage and education requirements are lower, while leaving some of the higher-level production in the region.

Currently, support service industries in the Juárez region are reinventing themselves in order to address the new demands placed on them by the current economic shift in the city. For example, job centers are now catering to the job seeker instead of employer in order to continue generating revenue. Commercial realtor services are marketing large developed buildings into smaller better-equipped manufacturing plants.

Current e-commerce development requires the implementation of high-tech fully automated systems that cater to the shopper. Although the initial trend was to automate the whole buying process of the consumer, the burst of the initial e-market has forced the industry to reevaluate previous misconceptions. Among these was the realization that an Internet based retailer is still very much dependent on the traditional brick and mortar business model. Although the Internet consumer demands technology and trouble-free immediate shopping experience, he nonetheless still expects courteous and convenient human interaction should a problem occur. The last thing this consumer needs is a system making him jump through loops and hurdles just to get a quick answer to a question. As the Internet marketplace continues to develop, more and more consumers will begin to task the already burdened customer service departments of the retailers. This creates an opportunity for our region, the development of customer service centers or e-centers.

An e-Center will not only provide call center services with 800 numbers but will also provide service via e-mail and electronic queries. As the e-commerce industry continues to mature, more manufacturers will be forced to provide customer service through electronic mediums. Focusing on the community's current rudimentary ability to communicate in both English and Spanish and encouraging the further development of these skills will give the borderplex a world wide advantage over other competitors. According to *The Cambridge Factfinder*¹, English and Spanish are the second and third most spoken languages in the world, with Chinese been the most used language. For the purposes of this initiative, we can discard Chinese as a possible competitor for two reasons. First, the Chinese e-commerce market is not expected to be viable in the near future because of the Chinese government's active interference against implementation of Internet technology within the country. Second, Mexico has steered away from competing directly with the Pacific Rim countries and instead has focused on Europe and the Americas as the country's future economic development. This is because Mexico sees the Pacific Rim as a major competitor to its own economic development.

Implementation of future e-Centers is attainable with little or no public sector assistance. Current call centers can provide the e-center capabilities as part of their current offering with little modifications to their current operations. As the need increases for this service, new operations can become fully functional within weeks and with minimal investments. Much as the call center of today operates, the e-Center of tomorrow will fulfill the world's e-commerce needs.

The services provided by these e-centers would be a little more complex then today's call center because of the addition of language and manufacturing knowledge requirements addressed below. Employees of these centers would be required to not only address customer service issues but also be required to process orders, handle client support issues, process returns, DOA's (Dead on Arrival) claims and provide sales support to customers.

Although the workforce is semi-prepared to service this industry, the local private sector and public sector can take a proactive stance in providing a sustainable solution to future workforce education. Unlike the workforce education initiatives in place today, the e-Technology workforce will need to meet two basic requirements in order to benefit from the El Paso Plan. Primarily, the initiative needs to encourage education in the proper use of written English and Spanish through the secondary education level. Although a bilingual workforce is in place, the use of proper written grammar is lacking. This addresses the first requirement, the final requirement is a workforce capable of rudimentary operation of computer interface systems, i.e.: the keyboard and the mouse. There is no need initially for this work force to have advanced computer knowledge in place because with knowledge base software², the user would just need to click in order to apply the appropriate response to the original query. Proper implementation of knowledge base software will allow the majority of the workforce to address over 70 to 80% of the calls to the center while the rest are escalated to appropriate response teams, which will require a smaller specialized workforce in order to address these. The production and development of specialized knowledge based software would be one of the ancillary services this initiative would immediately create as well as specialized workforce education centers.

The e-Center will be the anchor to future economic growth for the region. As the maturity of the Internet increases and the request for more and more e-Center services, the following economic segments will also begin to benefit. This is because the community has a built-in infrastructure and expertise in diverse industries thanks to the Maquila operations in Cd. Juárez.

Shipping and Customs Brokers

As part of the Maquila sector development, customs and broker operations are in operation on both sides of the border. Although NAFTA has created a basis by which the three countries can standardize shipping procedures, inherent differences in culture have created a specialized workforce. This workforce is active in meeting processing requirements for three diverse countries and in solving cross-border transit problems. This workforce is capable of addressing the needs of different cultural and governmental requirements of US, Mexico or Canada cross border trade, as well as Asian and European requirements. Specialized document preparation software and processes have been and continue to be initiated in our region. For example, local brokers have developed specialized software applications to securely transmit shipment information to governmental custom houses in anticipation of product crossing the borders. This has led to higher cross-border security and increased efficiencies allowing for on-time-deliver operations.

Short-Haul and Long Haul Transportation Infrastructure

The Maquila industry and the implementation of NAFTA have forced both communities to fortify their roads and bridges and address the problems of infrastructure deterioration by the increased traffic. Development of manufacturing and warehousing space has intensified on both sides of the border and previous developments stand ready to be used again as the Maquila industry recovers from the downturn of moving operations to Asia.

Specialized short-haul transportation systems are now ready to provide transportation for goods across the international bridges. Long haul systems in trucking and airfreight are ready to service Europe and South America as well as North America.

Advertising and Marketing Firms

El Paso is home to some of the best-known and talented advertising agencies with expertise and cultural issues. Not too long ago, Chevrolet found out how disastrous it is to business if they don't address cultural issues in their marketing campaigns. Although the decision to name a vehicle; "Nova" sounded like a fantastic marketing ploy for Chevrolet it proved disastrous for it in its largest foreign market. Although in English, the word Nova denotes a futuristic idea, in Spanish

the word actually means; "does not go." Would anybody want to buy a vehicle that its name signifies that it does not want to go? Chevrolet found out the hard way how not taking into account cultural differences can hurt the bottom line. With El Paso and Cd. Juarez' multi-cultural identity, these and other cultural issues can be avoided. By the simple fact that the population is aware of cultural differences forces the service providers to address them in any campaign. Local advertising agencies in our community have developed the expertise to manage campaign ads for e-commerce trade. Their expertise on cultural diversity and their proximity to the e-commerce initiative would be a benefit to them when competing against larger firms in traditional business centers.

Legal Services

One of the economic sectors to benefit the most from an active e-Commerce initiative is the one that has neglected this economic sector the most. Cross border-trade raises diverse legal implications that require specialized expertise in order to resolve.

Each country has a different set of requirements on how revenue is collected. Some countries will treat the amount due as a criminal offense while others will treat it as a civil affair. Collection procedures vary from country to country. In order for any business to properly maintain business viability, it should have the ability to collect outstanding monies owed to it. Law firms able to operate in diverse countries will make this goal attainable.

Another issue that the legal community needs to address is intellectual property protection. Asserting patent and trademark rights is difficult, as some countries have not actively adapted U.S. style intellectual property protection. Legal firms with expertise in these areas will benefit from an e-commerce initiative. Although the initiative allows for companies and individuals to collaborate from any place in the world, the human nature in us will still force us to congregate where the action is. Providing legal and customs expertise in the invoicing requirements for each country and the collections of monies owed will become a necessity.

For example, in Mexico, you must have a valid Mexican invoice for B-to-B expenses in order for the purchaser to claim a taxable deduction, without this, the purchasing company cannot capitalize the purchase and seek tax relief. Other country specific legal issues such as Germany's ban on all "Nazi" related products or a Muslim country's prohibition on partial nudity could land a company in legal jeopardy. Legal firms specializing in e-commerce issues will be first in line to be hired. Legal firms in other cities and even other countries can compete in this market but to adequately sell their products they would need to create a local presence. This will benefit the local tax base while creating more business for the local services support companies. The local business will have a competitive advantage when going head to head with a firm based out of the community.

Banking and Financial Services

The implementation of e-Commerce is dependent on financial institutions capable of handling transactions in diverse denominations and in non-standard formats. Credit card processing clearing-houses are a necessity for any e-commerce initiative. This creates an opportunity for local providers to provide service to principals that do not meet the standard requirements already in place. Not all business activity will base their operations from within the U.S. therefore they will have principals lacking social security numbers. This impedes the normal electronic processing of merchant account applications currently in use in the U.S.

Cross border trade of big ticket items will also require a trust-worthy, escrow services company to accomplish the transaction. Not all countries are comfortable in the use of credit cards to affect large purchases and legal implications on both sides negate prepayments or credit orders. An escrow company such as a PayPal.com will allow cross border trade with a larger audience. This

will also facilitate special money handling services such as wire transfers and money exchange services for different monetary systems.

Government clearing houses for duties will be an arm of the financial institutions. As the volume of trade increases the need for expedient and secure duties payment will be required by all governments involved enabling a local business to enter this lucrative market.

Technology Development Companies

The e-commerce economy will require local support services in Internet, software, network and hardware development. The most obvious need will be ecommerce website development and maintenance services. In order to affect these services, firms must provide a combination of expertise in software, advertising and graphics design. El Paso and Cd. Juárez are home to three major Internet development companies. These firms have attracted not only highly talented individuals from outside of the region but they have shown their ability to create and lead the way in advanced Internet development. Cognent, Inc., Stanton Street Technology Group in El Paso and infoLink in Juárez have shown that not only do they provide cutting edge technology to the community; they have the wherewithal to compete in an international level. Other local software development companies such as the EPV Group and e.Holguin actively compete against other companies located in traditional technological centers such as Austin and San Jose.

Part of the services these companies bring to the initiative includes an active research and development (R&D) component in new internet technologies and expertise in cross border trade software requirements. For example, most software in use today does not allow for the use of multiple last names commonly used by Mexican consumers. Alternatively, the requirement of entering a valid Social Security Number before a system is able to generate a credit worthiness report creates problems for companies wishing to do business internationally. Issues such as these can only be addressed by expertise in multi-cultural topics. Border companies have built-in expertise in the local workforce. By investing a little in this workforce, the workforce can rise to provide the community with more ammunition to hold back other out of city competitors.

Although other companies can hire expertise, they cannot teach a workforce to question cultural issues unless they themselves have lived it. An example of this is the local banks judging the performance of their local tellers based on benchmarks created at their headquarters. These benchmarks neglected to take into account the culture of using cash prevalent in this community. When a teller receives a large amount of cash, the teller must manually verify the transaction before completing the transaction. Since the original benchmark was created on the east coast, where large cash transactions are seldom encountered by the average teller because the east-coast culture is dependent on Credit Card, ATM and check transactions instead of cash, most local tellers fail to meet the standard per transaction created by the corporate offices. Most Americans carry little or no cash on them, while Mexican citizens conduct most of their business in cash. This forces the local teller to take more time per transaction than her counterpart on the east coast thereby negating the benchmark.

Computer hardware sales and support will also benefit from this initiative. Although mass-merchandisers such as Dell can provide the initial requirements for the infrastructure development, an ongoing repair and upgrade requirements will force the merchandisers to open local sales offices and create a local cottage industry to provide localized personal services to the e-Centers. Network services in both intranet and internet technologies will become a requirement that will only be adequately fulfilled by local providers. As the demand for expertise, increases look for education and manufacturer learning centers to provide services locally thereby increasing the workforce's access to educational opportunities. Cisco and Microsoft are two companies that actively create educational centers in order to support their product base more efficiently.

Although not completely inclusive of all industries, the initiative's implementation will create domino effect that will benefit all other segments of the economy. Increased warehousing activities will create the need for more truck drivers, forklift operators and hands-on labor. Support personnel requirements in customer service will surely increase. As the work force begins to participate in the initiative, services in food industries, housing, health and entertainment will increase proportionally. At the same time, support services in workforce education and welfare will begin to decrease and the burden on the taxpayer will begin to alleviate.

The increase in public resources such as roads and telecommunications needed to support the initiative will force the private sector to alleviate some of the burden because the fast-pace of the e-economy does not allow them to wait for government bureaucracy. This is exemplified in Juárez' private sector development of roadways, housing and mass transportation systems at the height of the Maquila boom. The needs of the private sector will force the private sector to provide for the community.

Why is the borderplex suited for this initiative?

El Paso and Cd. Juárez' geographic location, culture and international flavor give it the advantage over all other would be world-wide cities. No other city in the world offers El Paso's and Juárez' uniqueness and diversity.

El Paso and Cd. Juárez share the largest international metroplex in the world. El Paso sits on the direct route to world's largest emerging markets. Mexico is the United States' second largest trading partner, while Mexico on the other hand has the most experience in International trade in the world and is currently implementing a countrywide initiative embracing e-commerce as the basis for the country's economic future through President Fox's e-Mexico initiative. This ambitious program hopes to bring computer technology to nine out of 10 Mexicans by 2006.³ Although a very ambitious program, it will be difficult for Fox to make good on his initiative, it nevertheless shows the Mexican government's acknowledgement of the viability of world e-Commerce transactions.

Maquila operations have created an industry in sourcing and manufacturing experience with no equal anywhere else. Maquila operations are either currently operating or have operated in the past between Mexico, the United States, Korea, Taiwan, Japan and Germany among others. This has created an active expertise in country specific customs and government document requirements. With this expertise already in place, adding other countries to the list would not be overly difficult. Among the unique local cottage industries and international trade infrastructure of the region are customs services providers, specialists in meeting customs requirements and paperwork for originating and end-user countries. Transportation companies specializing in moving goods short distances between shipping hubs. Other unique expertise includes banking services allowing the exchange of currencies and the use of large sums of cash thereby allowing Maquilas to continue paying their employees in cash or provide check cashing services. Likewise, Casas de cambio that allow for the informal conversion of one currency to another for small businesses and individuals, thus avoiding the traditional bank is prevalent in our community. Other local services include translation services from one language to another, messenger services providing cross-border paperwork and small shipment transfers, real estate services for buying and selling of developed properties for manufacturing and warehousing facilities, employment services for cross-border recruitment of specialized personnel and legal firms providing services on both sides of the border.

Maquila operations have created a work force of qualified workers in Cd. Juárez that is able to manufacture high-technology equipment and that understands the cultural diversity in the work place. Juárez workers have been exposed to different habits and work ethics from different countries such as Japan and the United States. Middle and upper management employees have

been trained in foreign countries thereby learning the language and customs of the host country. Their experiences and knowledge can be shared with others in the work force.

El Paso and Cd. Juárez is home to the largest source of International trade experts; everyday people who deal with the complexities of international trade on a daily basis. El Paso and Cd. Juárez have grudgingly began to implement improved infrastructure for cross-border trade, among them, building up airport runways and warehousing facilities, construction of more border crossing points to handle larger product import and exports and development of land for manufacturing and warehousing facilities on both sides of the border.

El Paso and Cd. Juárez is home to a ready-made workforce capable of providing technical, support and ancillary services in both English and Spanish. The work force will require additional training in computer use and proper grammatical use of the languages, which can be accomplished with little additional investment. Private funding sources such as Microsoft and Dell are willingly and ready to provide hardware and educational incentives while the community can contribute learning facilitators.

El Paso and Cd. Juárez have been forced to deal with and correct problems associated with the maquila industry. This experience has created a knowledge base from which to draw from so that the borderplex can avoid future problems and eliminate current and future issues. A good example of this is the housing problems in Cd. Juárez. Maquilas have been forced to create a solution to part of the housing problem by eliminating some of the burden on the municipality, which frees up more resources for other problems. The solution was in allowing workers the ability to own a home by actively getting involved in housing projects. The main homeownership impediments to workers in Mexico is that Mexico does not have the credit availability for loaning money for home purchases available to U. S. workers.

This is because legal debtor protection and legal limitations in interest revenue make a loan unfeasible to traditional loaning institutions. Another impediment is that income is usually insufficient for home ownership and low unemployment locally and high unemployment in the interior of Mexico caused an influx of people seeking employment opportunities thereby reducing the available housing in the city. Maquilas provided part of the solution by building affordable housing and setting up loan programs for their employees including funding and servicing. The industry was forced to offer a solution to this problem because of worker retention problems; as the local qualified labor pool diminished attracting and retaining the labor pool became a necessity, thus forcing the private sector to provide housing as an incentive to qualified employees.

As the initiative is implemented, new issues will force the community to address them. Among these will be health, ecological and transportation. Interestingly, software development, which is the foundation of all computer and Internet technology, is one of the most ecologically friendly of all industries, while software development is one of the cheapest manufacturing industries to implement while allowing for maximum profits.

The capital requirements for software development are three fold: an idea or concept, computers and software tools for development and a technical staff for coding purposes. Unlike traditional manufacturing entities, the software developer has an added bonus, low-cost production of the product. In traditional development, the manufacture of the product incurs expenses in manufacture, assembly line and raw materials. In software development, the R&D is the most expensive part of the developmental process, once the product has been developed; the distribution of the product is minimal at best. The product has an added benefit in its inherent intellectual value that is difficult to copy and take to market because of copyright laws.

Finally, the additional influx of people will have a phased affect on both communities. First, the population increase will require more services thereby creating a heavier demand of local services increasing the local economy. This additional demand will begin to strain the local taxing

entity's ability to provide services. This initial strain should be quickly resolved by the private sector because it will be forced to offer solutions in order to continue operating efficiently. Cd. Juárez has already demonstrated that the local private sector is willing to step up to help the community. At the same time, an increase in the local tax base for both sides of the border will translate to better public services and higher wages. This in turn will lower the unemployment rate and will translate into a higher standard of living for both communities.

What is wrong with e-Commerce Today?

The rush to get rich quick has led to a pessimistic perception about the e-Commerce market. With fortunes lost in ill-advised investments, improper implementation of e-Commerce and exaggerated tales of riches being made has created a culture of wait and see before investing in more e-commerce. As the gold rush of our generation, the Internet has brought out the scam artists of our generation and created a race to be the first.

Fortunately, the rapid implementation of the technology of the Internet forces the world to move forward in embracing it. According to the U.S. Census Bureau, 2nd Quarter e-Commerce retail sales were \$10.2 billion dollars, up 24.2% from 2001.⁴ Although economic downturns have affected most industries, e-Commerce continues to play a vital and important role in world economies.

Why is Mexico Such an Integral Part of the Initiative?

Mexico is the single most important part of this initiative for two reasons. The first is the Mexican government's initiative in creating a country wide e-Mexico mind set among the population. This initiative not only builds on the Mexican infrastructure in computers, population and Internet technologies but it officially encourages the Mexican people to embrace the technology as an important component of economic prosperity. Not only has the country encouraged participation in this technology but it also has taken the lead in providing e-services for the population.⁵ Some government agencies, such as Hacienda, Mexico's IRS equivalent has begun to require small business owners to pay quarterly taxes via the Internet. Individuals or businesses doing more than \$1,000,000 pesos (\$10,000 US dollars) in income last year are required to submit reports and make payments via the Internet.⁶ Other government offices have made government transactions available via the Internet. The most compelling example of Mexico's embracing of e-technology is the governmental site for INEGI, Mexico's census and statistical clearinghouse. Almost any type of research and analysis involving country statistical information is available free of charge to the public via the Internet. Research statistics and powerful research tools are included to access the public data.

Although Mexico's implementation of Internet technology would be sufficient to include it in the initiative, Mexico's Free Trade Agreements with other countries makes Mexico the ideal partner for any worldwide e-commerce initiative. Mexico, the 12th largest economy in 2002 has active trade agreements with the following countries:

1. NAFTA with the United States and Canada 1994
2. Treaty with Bolivia 1995
3. Treaty with Chile 1999
4. Treaty with Costa Rica 1995
5. G-3 Treaty Columbia and Venezuela 1995
6. Treaty with Nicaragua 1998
7. Treaty with El Salvador, Honduras & Guatemala 2001
8. Treaty with Israel 2000
9. European Union treaty encompassing: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden and the United Kingdom. 2000



Figure 1: Mexico's Active Free Trade Agreements

This makes Mexico as an ideal central distribution point from where to conduct Internet retail services. With Mexico as the scope of the retail market, commerce with the largest trading block in the world is almost tax and trade friendly. With Mexico's stated investment in Internet technology, its active trade negotiations makes it ideal as the center for world trading.

What must be done?

Implementation of the initiative requires the following components. The most important of these is an acceptance by both communities that El Paso and Cd. Juárez are culturally and economically dependent on each other. Both communities depend on each other's cooperation and friendship in order to address the challenges facing them. Water shortages and ecological issues are just the beginning. What hurts one part of the community affects the other. Economic prosperity benefits both communities while downturns hurt both. Mutual respect and the understanding that only as a team can the community prosper is the fundamental component to the initiative. Without these, each community's economic initiative will cancel each other out. Instead of competing against each other, both communities need to come together as a team.

Investment in basic education initiatives is also a requirement. The education should start out with the basics in computer interaction. Basic keyboard and mouse techniques are sufficient for the phase one work force. Secondary education reinforcement of language skills and communication are key. As the initiative is implemented, workforce educational requirements will increase forcing the private sector to create new educational opportunities for the community.

The lighting of the fiber optic can be phased in as the demand increases. The cost will be supported by the private sector as the business revenue increases through the demand of services. Additional ancillary services in network implementation will be required. Again, these will be funded by the same industries benefiting from the initiative.

Public sector entities need to take a proactive role in embracing the Internet. This can be accomplished by focusing on providing services to the community via the Internet. This will have two desired effects. First, the burden on the taxpayer will be alleviated by the reduction of overhead and two; the community will be encouraged to participate in the Internet. There will of

course be turf battles and resistance to the implementation of the technology in public service entities. A strong leader who embraces the technology and a community willing to move forward will be the solution to this impediment. The government must back up the support of the initiative through words and action. Without this, the initiative is sure to fail. The private sector needs to embrace the technology of the Internet in their everyday operations. This will force the community to step up the effort in educative and infrastructure requirements. These can be implemented in phases thereby by not burdening the small businesses. A culture of Internet dependence needs to developed and encouraged across the community.

The County of El Paso has begun this process by the deployment of the downtown Wireless effort slated to launch during the second quarter of 2007. County Judge Anthony Cobos has made expansion of countywide deployment of WiFi service part of his economic development plan.

Local businesses need to accept the Internet as the only viable solution to future growth. One of the Internet's greatest advantages is that its implementation can be phased in and as each section is activated, overhead costs are diminished. For example, small businesses can start by making e-mail an official communication tool. The implementation of this tool will initially cost the business in ISP services, but the cost will immediately be offset by better communication management and a reduction of long distance costs. As dependence on the technology increases, the efficiency will increase and additional costs will be offset by other savings. Eventually the technology will open a completely new market for the company's product, increasing revenues and market potential. El Paso and Cd. Juárez companies need to start focusing on Internet technology for their daily operations.

Summary

El Paso and Cd. Juárez are at the center of the greatest gold rush of our century. Minimal investment in educational resources and the implementation of existing infrastructure will allow the borderplex to become the world's premiere Internet ecommerce provider. The community's existing bi-lingual and bi-cultural workforce provides the ingredient most required to make the community a successful and vibrant e-commerce fulfillment center. Unique expertise in cross border trade and cultural diversity coupled with existing infrastructure in Juárez has given our region the unique opportunity to be the leader in the gold rush. Mexico's initiative in world trade agreements and e-technology development completes the requirements that allow the borderplex the ability to provide the services required for worldwide e-commerce business transactions.

The requirements for implementing the initiative are already in place. Small to medium size businesses are capable of participating. Local government intervention needs are minimal and the taxpayer will be minimally required. The Internet allows anyone to compete on a level playing field regardless of location and funding. Small businesses are able to take on the business goliaths and prevail.

Minimal investments from private and public sectors will provide the basis for the initiative. An active embracing of Internet technology by both governments and school systems will prepare a better-equipped work force for the initiative. As the e-commerce market continues to mature, the domino effect will create more and more demands on the local business community to provide more services which will generate greater revenues and a greater demand for a larger workforce employing more workers. As the community becomes the world e-commerce center, the quality of life will increase proportionally and create new opportunities for continued community growth.

The key to the initiative is the embracing of the Internet, an education initiative for both communities and an acknowledgment by residents of El Paso and Cd. Juárez that only in working together as a team can the region prosper economically. Without these components, the initiative

is sure to fail and our community will continue to stagnate. The key to future prosperity is within our grasp, whether we move forward is still up to both cities.

Footnotes:

1. *The Cambridge Factfinder*, Cambridge University Press 1993.
2. Knowledge Base software is a relational database that allows a query to be made that will generate a response based on the individual components and conditions the original query is based on. Two similar questions will generate more than one possible answer based on the condition surrounding the query. For example, while building a bicycle, the consumer queries the knowledge base with the question, "The chain does not fit the sprocket." Depending on the circumstances, the wrong size chain was shipped with the product or the customer forgot to include a spacer when assembling the unit, the knowledge base might direct the customer to install the spacer or will tell him that the appropriate chain is being delivered to him tomorrow. A knowledge base has the ability to "learn" as the queries are presented to it. This allows for a dynamic growing database that is able to provide answers with less human interaction.
3. E-Mexico on Fast Track – Microsoft Embraces Fox Plan to Bridge Digital Divide by Dean Calbreath, San Diego Union Tribune, April 25, 2002.
4. Monthly Retail Surveys Branch, US Census Bureau Press Release, August 22, 2002.
5. e-Mexico.gob.mx – "Strategic Options for the Computer Science Development of the Federal Public Administration" In Spanish.
6. sat.gob.mx – "Nuevo Esquema de Pagos Electrónicos", September 15, 2002