PORTS-TO-PLAINS ECONOMIC DEVELOPMENT RESEARCH PROJECT FULL REPORT

INTRODUCTION

The Ports-to-Plains Corridor Coalition has asked the Commonwealth Consulting Corporation (Commonwealth) and Business Development Advisors (BDA) team to conduct an economic development research project. The purposes of the project are to:

- Analyze economic activity along the corridor
- Identify catalyst projects that can enhance economic development along the corridor

The outcome of this project will be a set of action items for the Coalition as a whole and individual corridor communities to pursue to advance the Ports-to-Plains mission.

This research project is important for several reasons:

- It will bolster the Coalition's ability to gain support for the Corridor's development by identifying potential economic benefits;
- It will organize, for the first time, economic data about the communities that make up the Corridor, which will support future decision-making and economic development initiatives;
- It will identify a set of activities to pursue in the context of the Corridor that complements both existing local economic development initiatives and Coalition efforts; and
- It will contribute to ongoing efforts to establish a unified Corridor community.

PROJECT METHODOLOGY AND REPORT STRUCTURE

The Commonwealth team's approach to this project has been to start at the community level and build up the analysis and recommendations from the local perspective. In contrast to many economic development studies, including those performed for other NAFTA trade corridors, we opted against state- or regional-level, top-down analysis that would dilute or hide the actual economic features of the Corridor communities. Instead of examining three states or five metropolitan areas, we analyzed 20 individual cities, counties and towns along the Corridor to create an accurate and relevant economic picture.

To this end, we have provided community-level detail on the factors that affect economic development – not just broad economic data. In addition to examining factors like population and employment, we have worked with communities to identify key community assets, from infrastructure to higher education, that will affect economic development prospects.

Commonwealth was also asked to identify action items, not create a general strategy document. We strongly believe that this guidance should come from communities, not a consultant. Our role, then, was to obtain input on priorities and goals from community leaders, which we then put in the context of the overall economic picture for the corridor.

Finally, we used our knowledge of the federal government and economic development practices to supplement community inputs with a review of appropriate federal-level transportation and economic development programs that could serve as catalysts for development. We also have preliminarily identified a set of potential business development opportunities that relate to increased trade traffic along the Corridor.

To accomplish these goals, we employed the following methodology:

- Identified corridor communities for analysis with Ports-to-Plains Coalition approval;

- Obtained county-level data on economic base, work force, and infrastructure from both local and reliable third-party (primarily US government) data sources;

- Interviewed corridor communities to identify community assets; economic development issues, goals, and projects; and expectations for the Ports-to-Plains corridor;

- Assessed federal-level project funding opportunities that could serve as catalysts to support community and corridor-wide economic development objectives using our Washington, DC-based network and research capability; and

- Analyzed business development opportunities that could be generated from increased trade traffic along the Corridor, drawing on studies of highway-related economic development, local insights into the nature of the traffic, and several trade databases.

Based on maps of the corridor and inputs about economic activity along the route, Commonwealth worked with Ports-to-Plains to identify the following locations as the focus of the analysis. While we are considering the corridor in its entirety, we selected these locations for the data analysis and interviews. They are, from north to south:

1. Denver, CO	Denver County
2. Limon, CO	Lincoln County
3. Lamar, CO	Prowers County
4. Boise City, OK	Cimarron County
5. Stratford, TX	Sherman County
6. Dumas, TX	Moore County
7. Amarillo and Canyon, TX	Potter and Randall Counties
8. Tulia, TX	Swisher County
9. Plainview, TX	Hale County
10. Lubbock, TX	Lubbock County
11. O'Donnell, TX	Lynn County
12. Lamesa, TX	Dawson County
13. Big Spring, TX	Howard County
14. Midland, TX	Midland County
15. San Angelo, TX	Tom Green County
16. Sonora, TX	Sutton County
17. Del Rio, TX	Val Verde County
18. Eagle Pass, TX	Maverick County
19. Laredo, TX	Webb County

The report includes the following sections:

- Corridor Economic Data
- Catalyst Projects: Federal Programs
- Business Development Opportunities
- Conclusions and Proposed Action Items

CORRIDOR ECONOMIC DATA

This section establishes a baseline of economic data for the communities along the Corridor. It also collects, for the first time, basic information about the Corridor communities and puts it into the context of the Corridor. Understanding the economic features of the Corridor communities will facilitate better decision-making for economic development strategies.

We provide below both economic data (on population, income and work force, for example) and community-level data on assets that affect economic development opportunities (such as universities, federal facilities, airports, etc.). Both are important. The general economic information provides the context and describes what exists today, while the data on community assets describe the building blocks of what is possible. While there is a great deal of economic information that could be provided on each community, we have strived to focus on the most relevant factors affecting economic development.

This section provides data on:

- Economic Base
- Work Force
- Infrastructure
- Institutions and Facilities
- Economic Development Activities

By understanding these factors, we will be better able to draw conclusions about the type of catalyst projects, federal programs, and business development opportunities that are appropriate along the Corridor.

ECONOMIC BASE

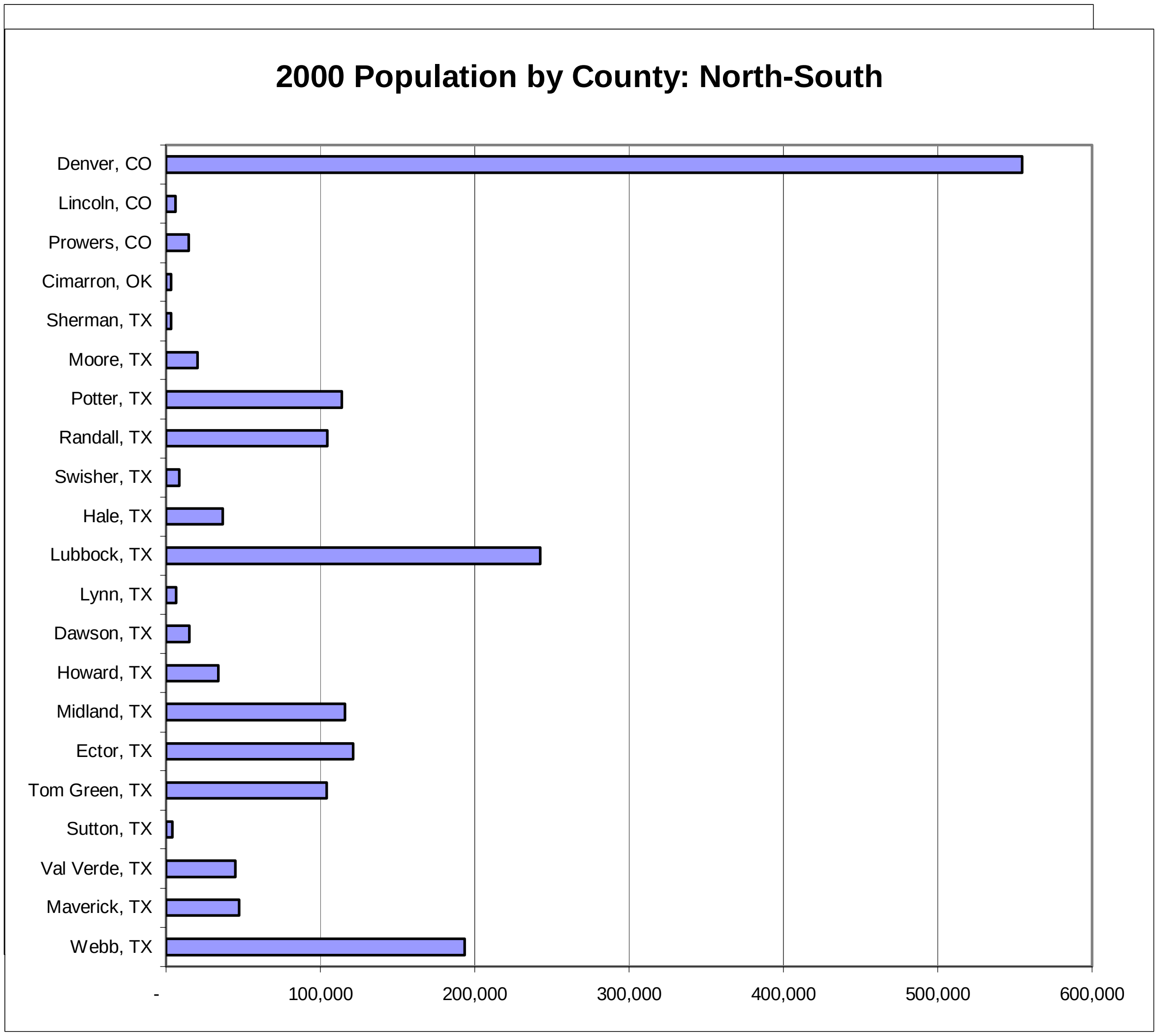
Economic base indicates a location's potential to support different types of operations. This factor is frequently assessed by corporate site seekers who typically consider the size and growth of population, income, and business base by sector. We provide data for both counties and metropolitan statistical areas (MSAs) because site seekers will often screen locations at the MSA level. This section will cover:

- Population
- Income

- Business Base (employment by sector)

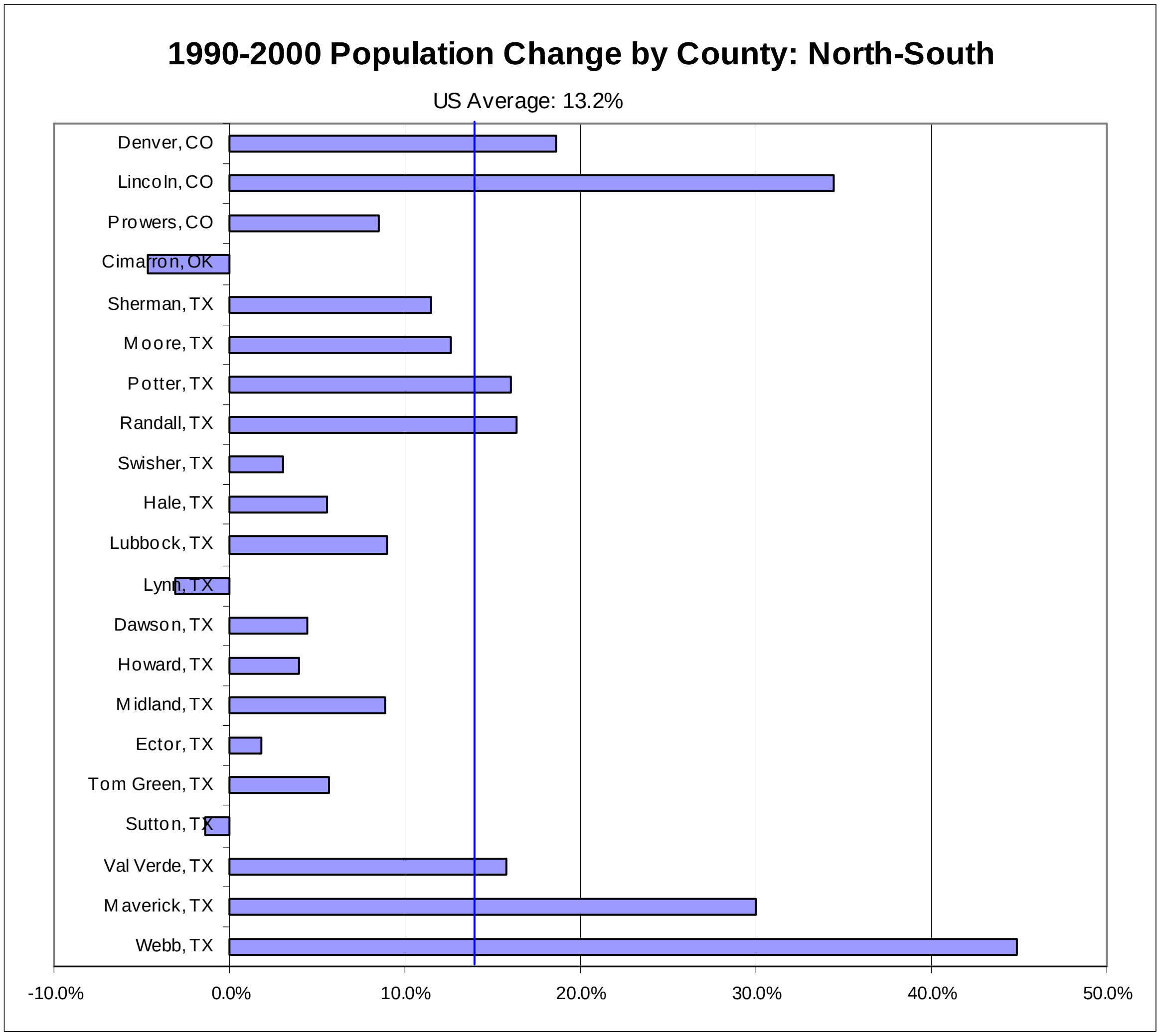
Population

- Population ranges widely among the Corridor communities, from approximately 3,000 people in Cimarron County, Oklahoma to over 550,000 in Denver County, Colorado.



Source: US Census

- As demonstrated below, seven of the 21 counties examined here exceeded the US population growth rate between 1990 and 2000, including the three border counties, Denver and Lincoln Counties, CO, and Potter and Randall Counties, TX (Amarillo).



Source: US Census

- The Corridor's population is concentrated in the metropolitan areas. Most of the metro areas along the corridor have fewer than 250,000 people. The Denver metropolitan statistical area (MSA) is the largest economic node by far, with a population that exceeds the total population for the rest of the communities combined.

POPULATION AND GROWTH FOR CORRIDOR MSAS

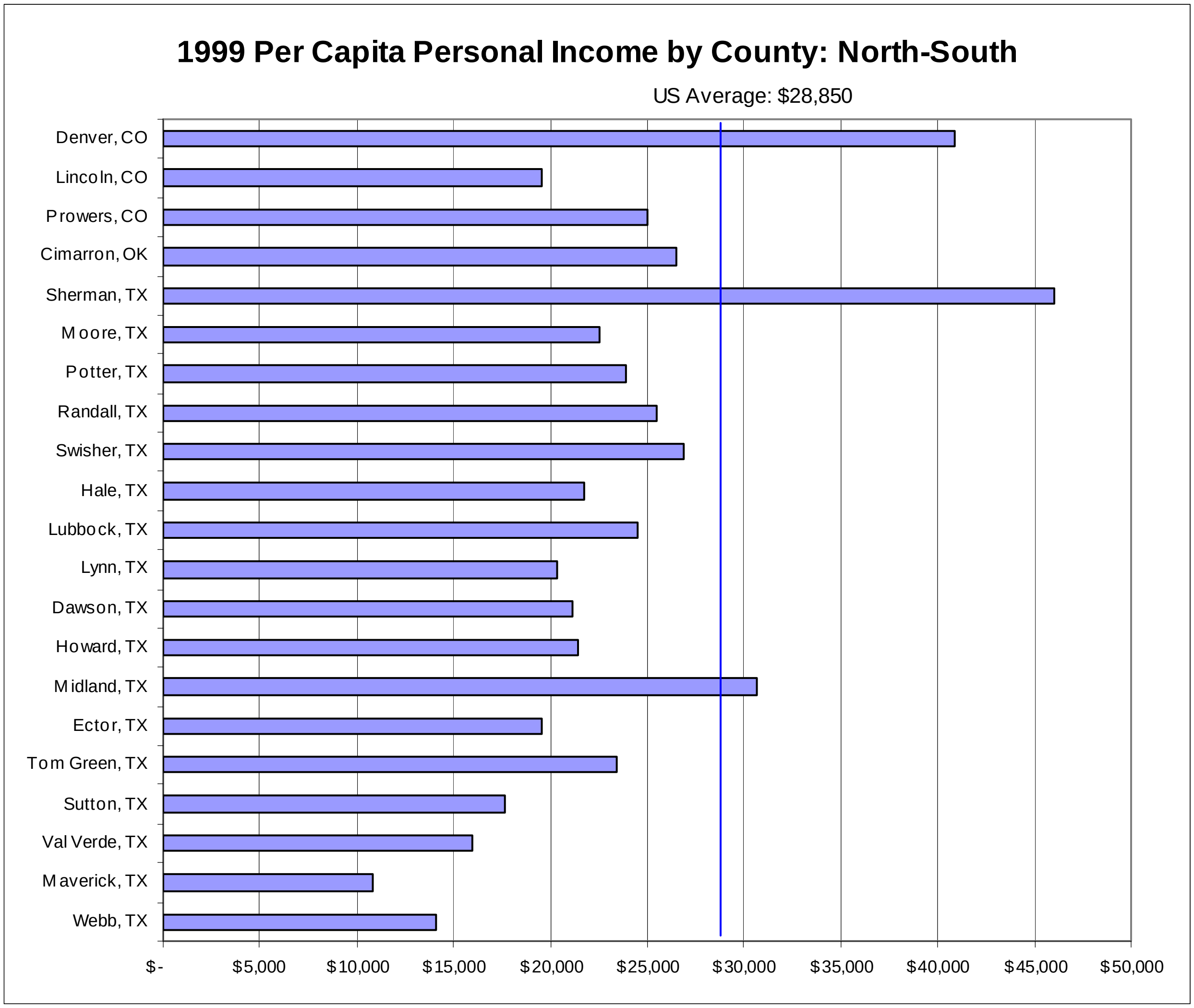
	1990	2000	% CHANGE
Denver	1,980,140	2,581,506	30.4%
Amarillo	187,547	217,858	16.2%
Lubbock	222,636	242,628	9.0%
Midland-Odessa	225,545	237,132	5.1%
San Angelo	98,458	104,010	5.6%
Laredo	133,239	193,117	44.9%

Source: US Census

Income

- Most of the counties in the Corridor have per capita personal incomes below the US average. The exceptions are Denver County, CO; Midland County, TX; and Sherman County, TX.

- The border counties have the lowest per capita incomes among the Corridor communities. Several additional counties are below 75% of the US average, including Lincoln, CO; and Sutton, Ector, Lynn, Dawson, and Howard, TX.

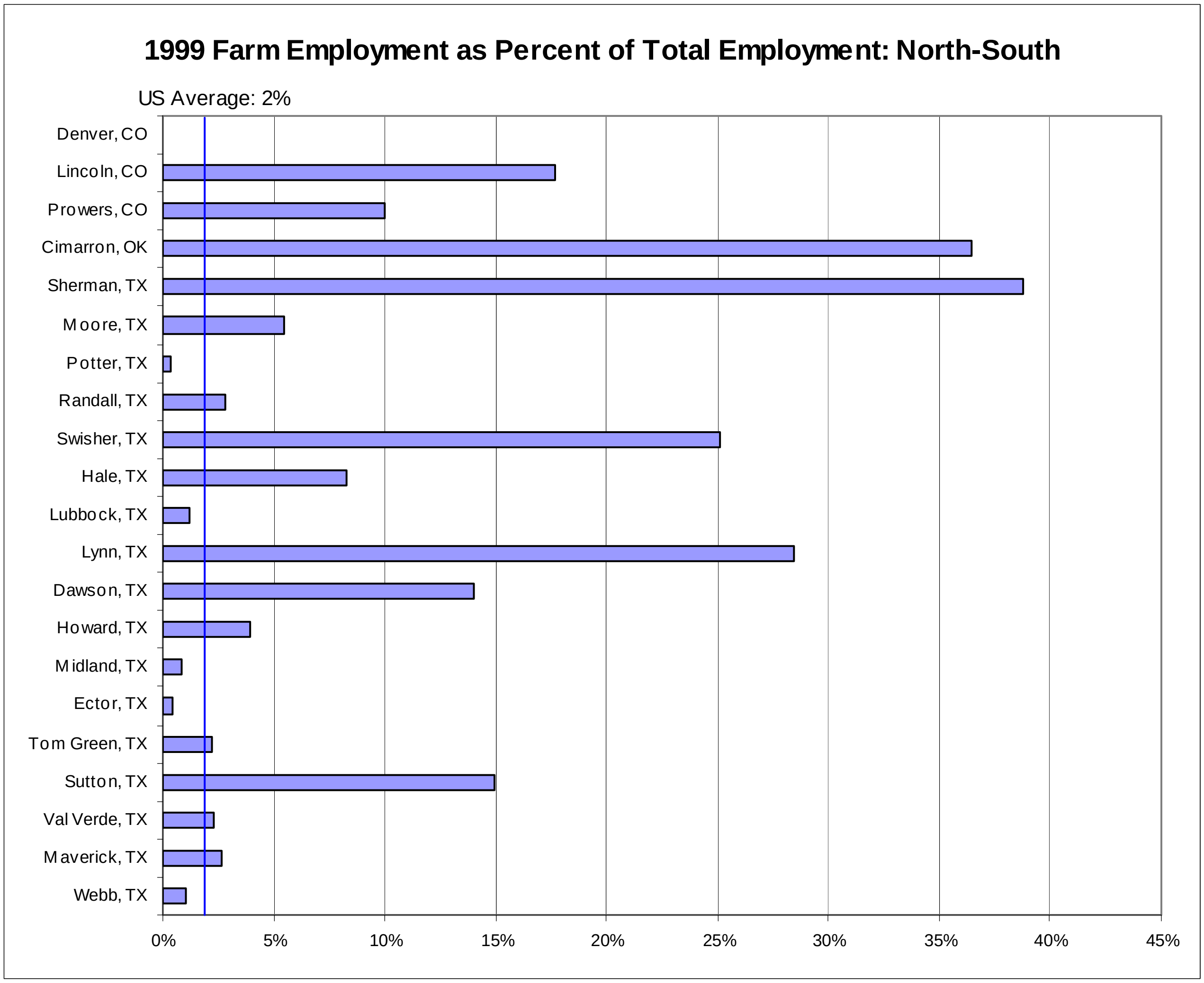


Source: US Department of Commerce, Bureau of Economic Analysis

Business Base: Employment by Sector

- In this section we examine employment in the following sectors: farm, manufacturing, services, and transportation and utilities. We provide data on employment in these sectors as a percent of total employment to understand the importance of each sector to the local economy. We also provide the US average for comparison.

- farming employment exceeding 20% of total employment.



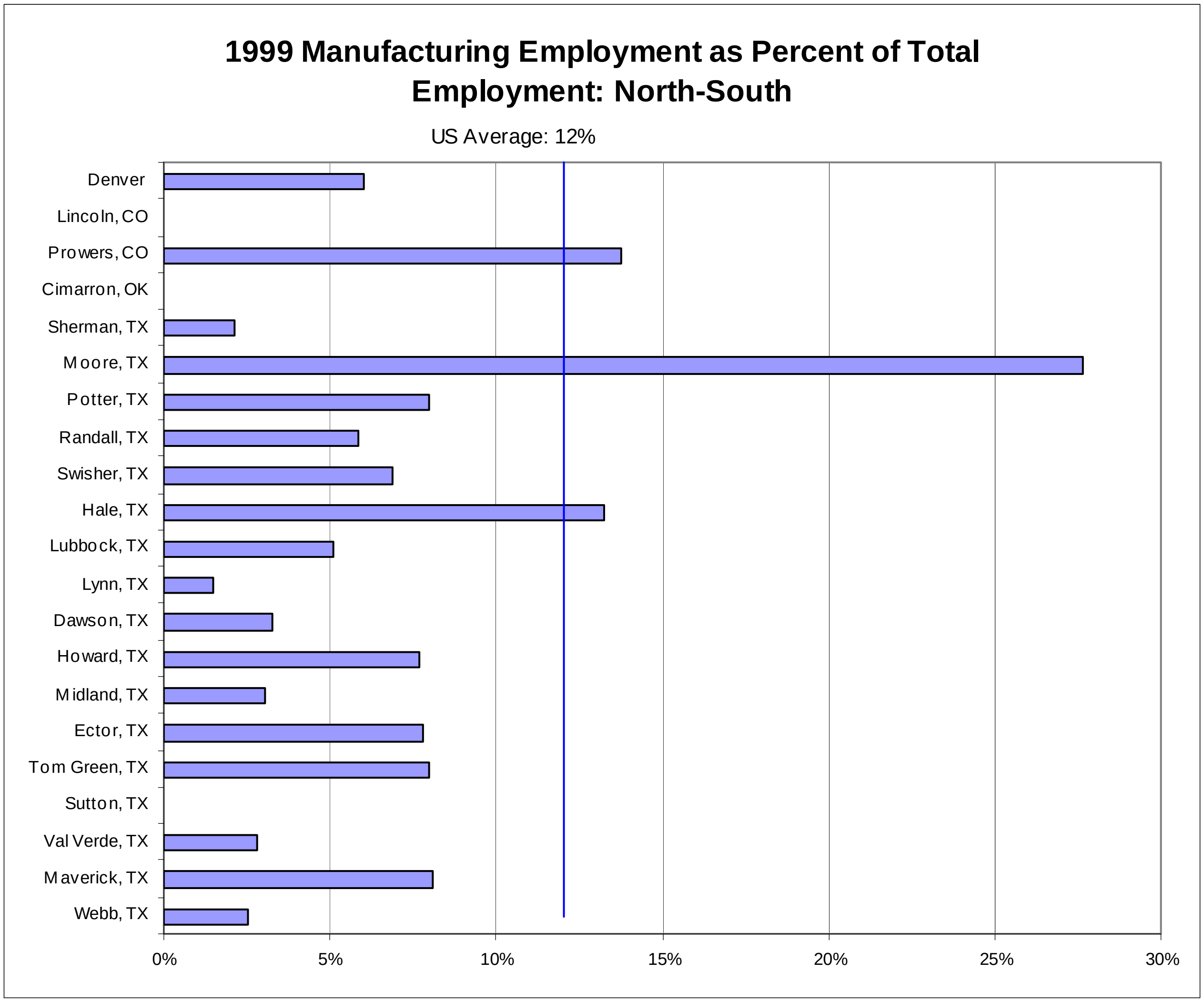
Source: US Department of Commerce, Bureau of Economic Analysis

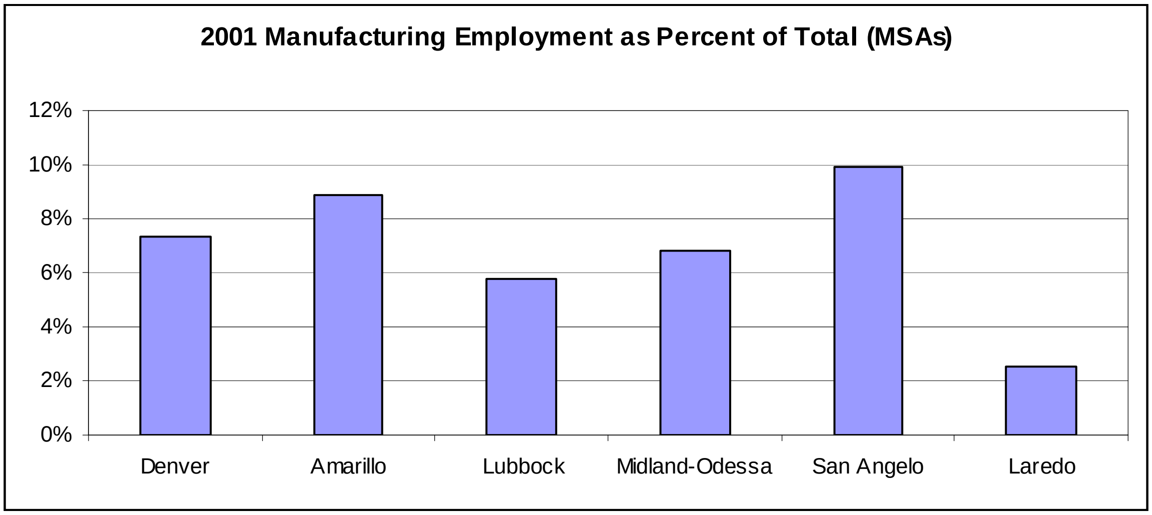
The majority of counties along the corridor exceed the US average of 2% farm employment, with several exceeding it by a wide margin. Sherman, TX; Cimarron, OK; Lynn, TX; and Swisher, TX, are the leaders in this category, with

- In most counties along the corridor, the rate of manufacturing employment is below the US average of 12%. Moore County is a notable exception, with much of its manufacturing employment at a major beef processing facility. Prowers County, CO and Hale County, TX are the only other counties with more than 10% of employment in manufacturing.

- The San Angelo and Amarillo metropolitan areas have the greatest rate of manufacturing employment among the Corridor MSAs. (The MSA data does not include farm employment, so these percentages do not match the county data).

Source: US Department of Commerce, Bureau of Economic Analysis

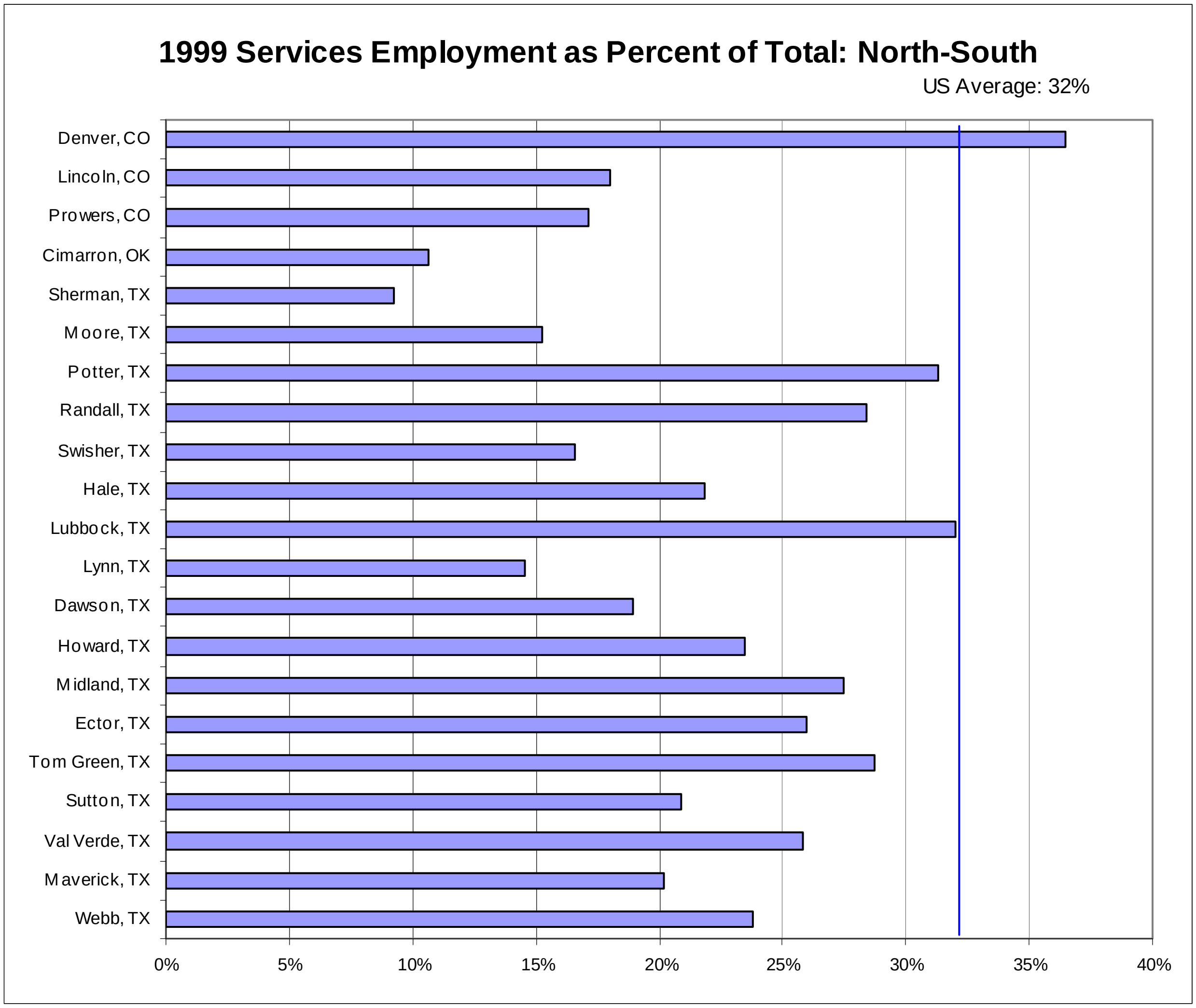




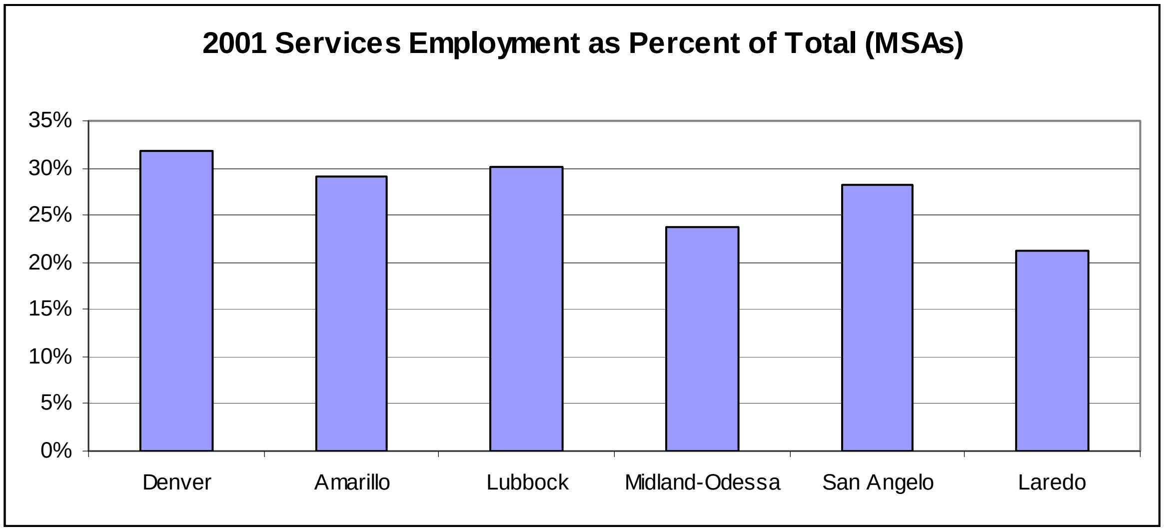
Source: US Department of Labor, Bureau of Labor Statistics

- The corridor also tends to be underrepresented in services sector employment, with most communities well under the US average of 32%. Only Denver and Lubbock meet or exceed the US average.

- Services employment tends to be more concentrated in the urban areas of the Corridor. In addition to Denver and Lubbock, Potter, Tom Green, Randall and Midland Counties are regional leaders by this measure. The same pattern can be seen in the chart summarizing employment by MSA. Only Midland-Odessa and Laredo lag on this factor.



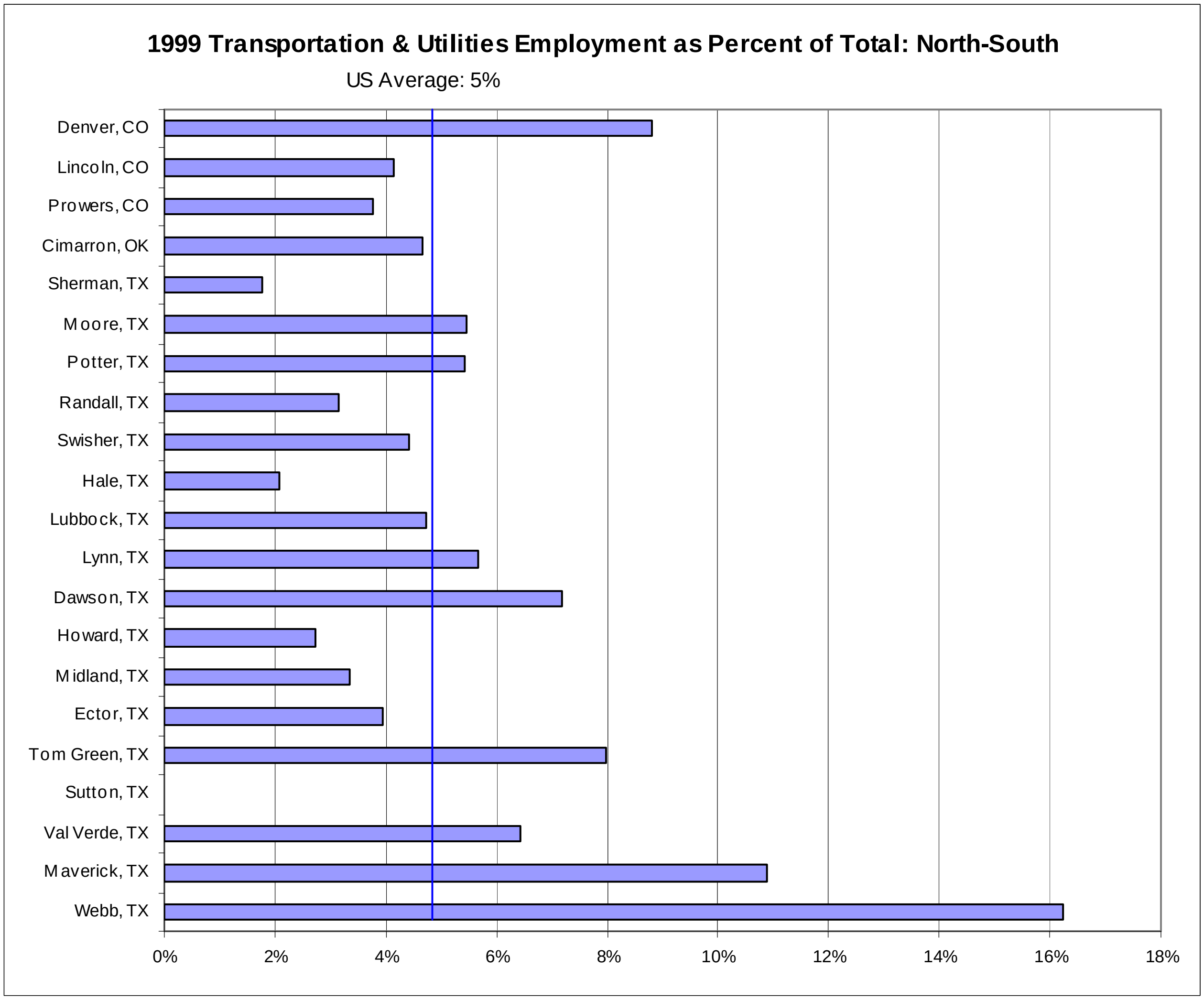
Source: US Department of Commerce, Bureau of Economic Analysis



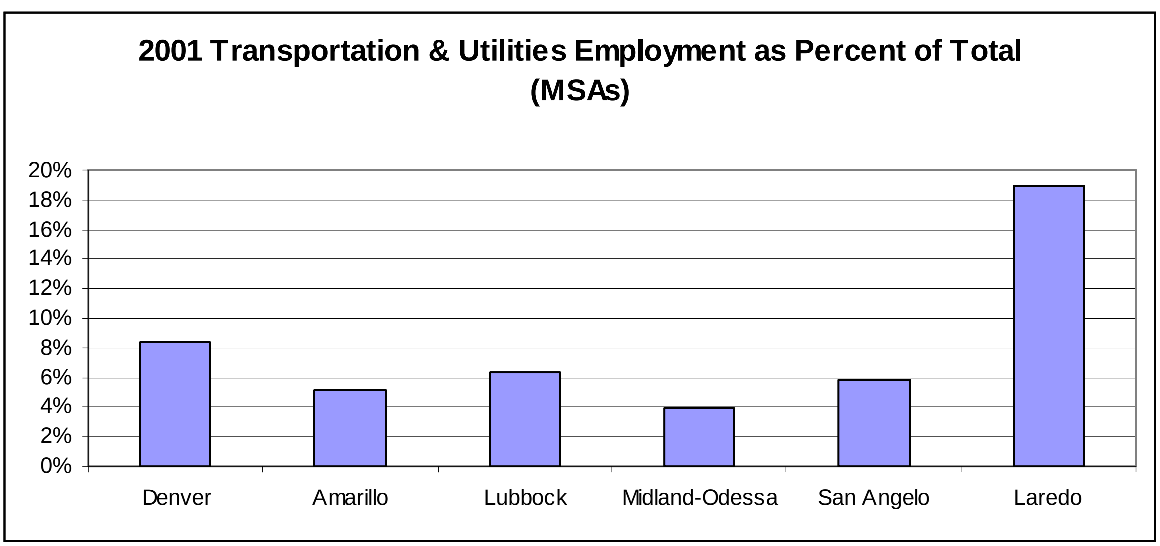
Source: US Department of Labor, Bureau of Labor Statistics

- Roughly half of the Corridor communities have transportation and utilities employment above the US average of 5%. As would be expected, Webb County (Laredo) has the highest rate by far among the Corridor communities. Other leaders by this measure are Maverick, Denver, Tom Green, Dawson, and Val Verde Counties.

- Again, the urban areas tend to have higher concentrations of employment in this category, but the differential is not as pronounced as with the services sector. Several rural counties also have relatively strong rates of transportation employment.



Source: US Department of Commerce, Bureau of Economic Analysis



WORK FORCE

Labor market attributes remain among the most important factors in business location decisions, with labor quality eclipsing cost as the most critical. Availability of skilled labor remains a concern nationwide.

Work force issues are extremely important for most of the Corridor communities. For several, convincing employers that the region has a sufficient work force to support operations is a major problem. Some larger communities have conducted work force studies that quantify the size of the labor draw area beyond their statistical borders and provide detailed information about the availability and quality of workers to address negative perceptions that hinder business attraction. For others, declining populations and low unemployment mean jobs are available, but there is nobody to fill them, which hurts efforts to keep the businesses they have.

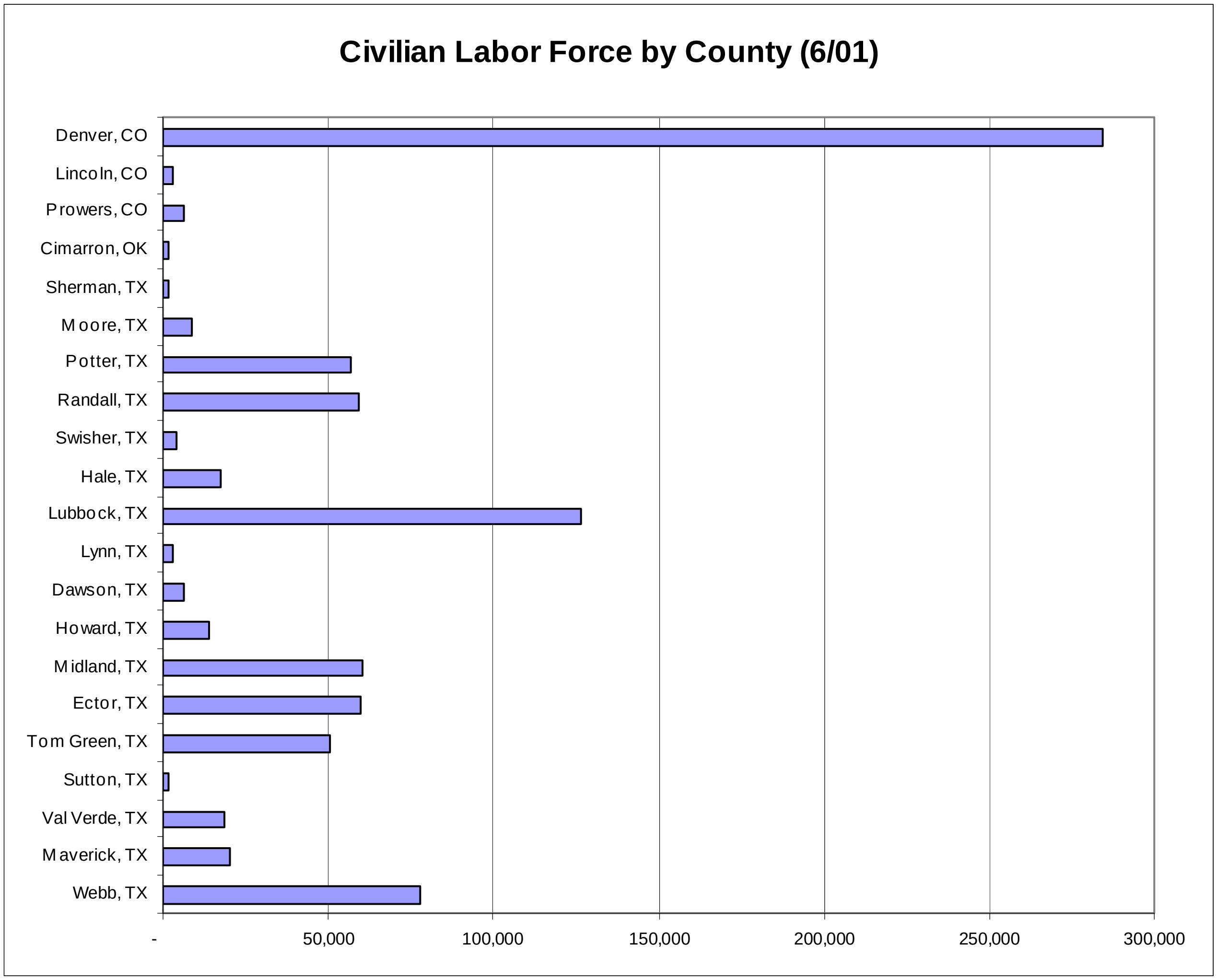
A related workforce issue for many communities is that absent local opportunities, many people are leaving to find desirable jobs in other areas. The problem is especially acute for college-educated people, for whom community leaders fear there are not sufficient numbers of attractive jobs to stay. As these people leave, further depleting the work force, economic growth becomes more difficult. Creating new jobs that will keep people in the community is a priority for much of the Corridor.

These issues are somewhat unique. Many urban areas have low unemployment but are still creating many new jobs and struggle to manage growth. There are also many rural areas and urban pockets that have high unemployment and need to create jobs. The corridor communities have low unemployment, but see the need to create new, attractive, well-paying jobs to stem the loss of population to other areas and set the economy on a stronger growth trajectory.

This section reviews labor availability (labor force and unemployment), wages, and education.

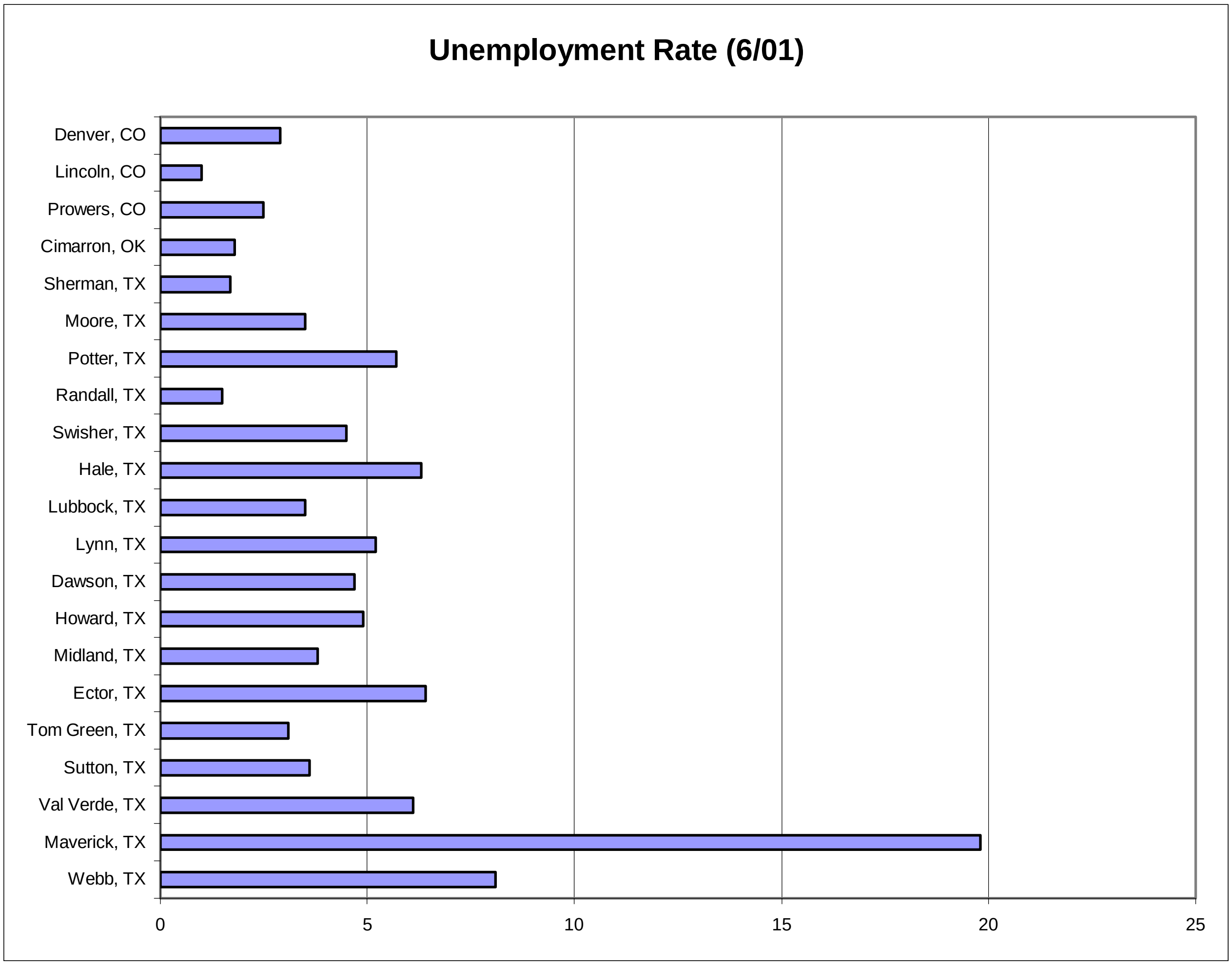
Availability

- Most of the counties along the corridor have labor forces that are well under 50,000 – many are under 10,000. Denver, Lubbock, and Webb Counties have the largest labor forces among these locations.



Sources: Texas Workforce Commission, Colorado Department of Labor & Employment, and Oklahoma Employment Security Commission

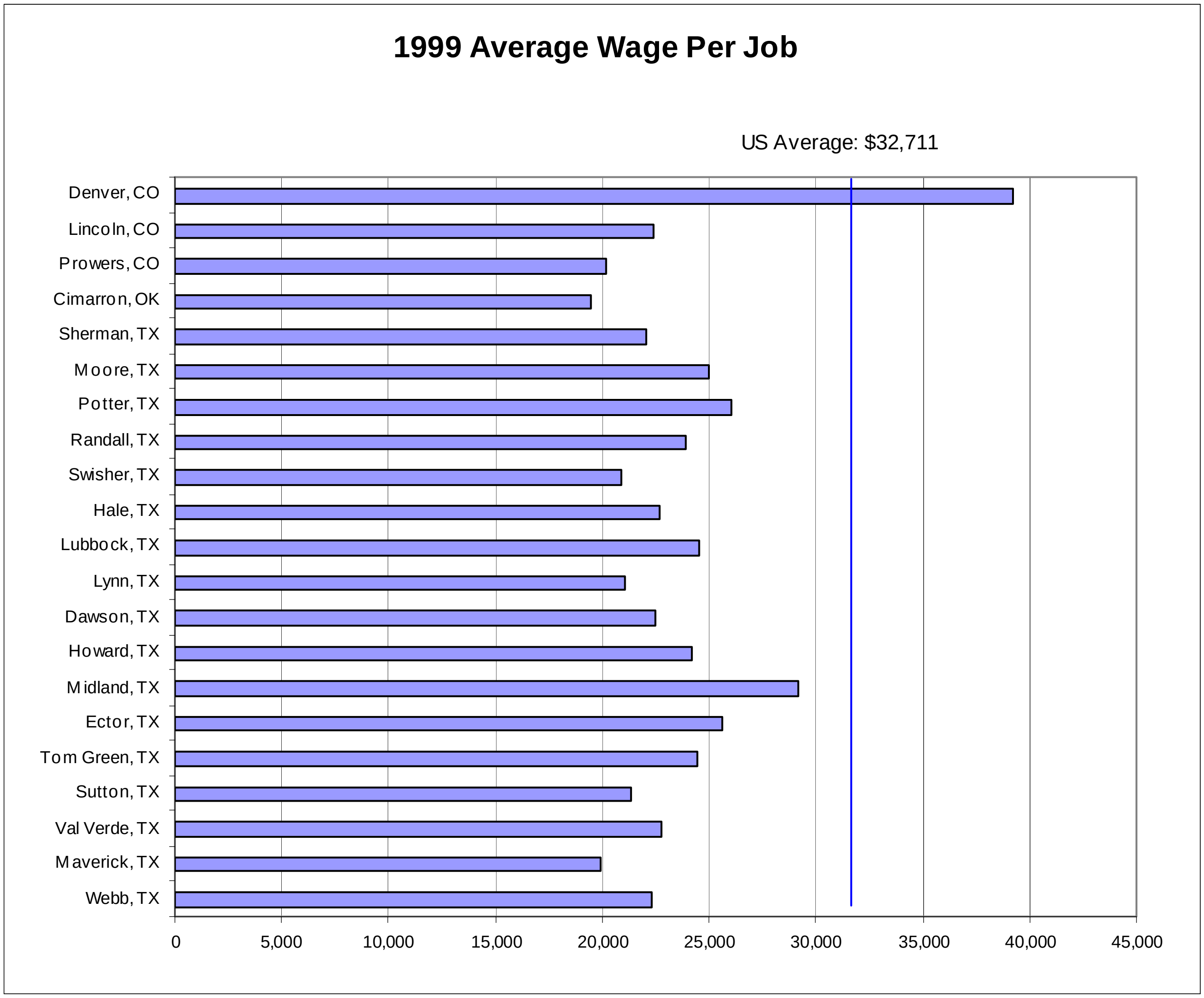
- Low unemployment rates in many communities along the Corridor further the perception that the available labor force is too small. The US employment rate in June 2001 was 4.5%. While the average rate for the Corridor was slightly higher, at 4.8%, the more representative rate was only 4%, which excludes outlier Maverick County.



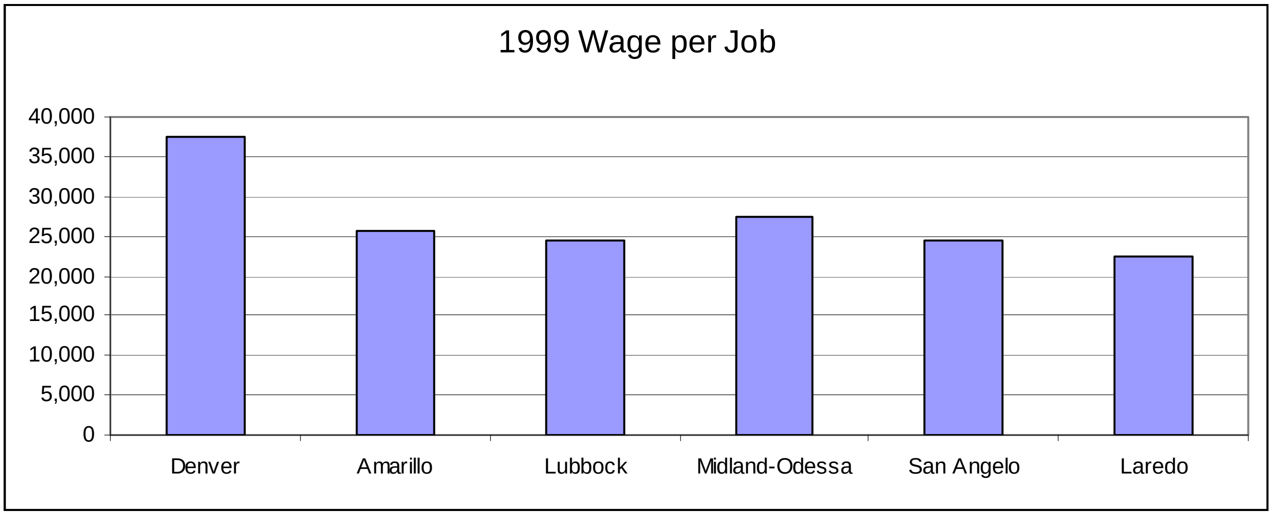
Sources: Texas Workforce Commission, Colorado Department of Labor & Employment, and Oklahoma Employment Security Commission

Wages

- Average annual wages in most of the corridor communities are well below the US average of over $32,000. Excluding Denver, wages do not vary as much as one would expect among the remaining communities, ranging from $20-$25,000 for the most part. This pattern is consistent at the MSA level.



Source: US Department of Commerce, Bureau of Economic Analysis

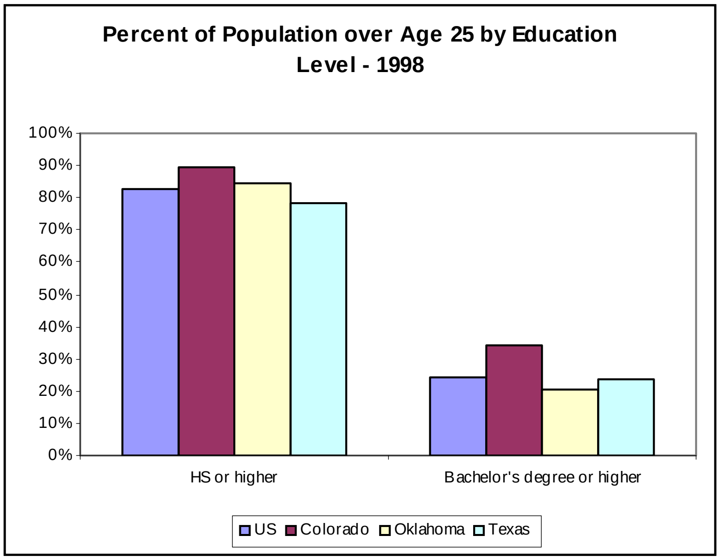


Source: US Department of Commerce, Bureau of Economic Analysis

Education

Education statistics, especially educational attaiment, are often used as a proxy measure of work force quality. Unfortunately, the latest county data for educational attainment is from 1990. We believe these statistics do not accurately reflect educational attainment today. Instead we provide the same statistic for the state level for 1998, understanding the limitations of the data for the Corridor. We supplement it with a summary of degrees awarded from colleges and universities along the Corridor.

- In Texas, the percentage of population with at least a high school degree is below the US average, while the percentage with a bachelor's degree or higher is very close to average. Colorado exceeds the US average on both measures, while Oklahoma lags by higher education, but is slightly above average on the high school measure.



- Source: US Department of Commerce, Bureau of the Census

- The Corridor has several public and a few private colleges and universities. Both are important for the supply of new graduates and, often, for quality of life factors that affect ability to attract new people and businesses to a community. Further, many provide company- or industry-specific training, certification, or degree programs that directly support economic development.

DEGREES AWARDED BY LEVEL – PUBLIC INSTITUIONS, FY 1999

	ASSOCIATE	BACHELOR'S	MASTER'S	DOCTORATE
Lamar Community College	54			
Amarillo College	517			
West Texas A&M		612	189	24
Texas Tech		3,386	809	169
Howard College	157			
Midland College	295			
Angelo State	75	843	125	
Southwest TX Junior College	241			
Sul Ross State/Rio Grande College		153	62	

Texas A&M Intl. (Laredo)		414	207	
Laredo Community College	449			

Source: Texas Higher Education Coordinating Board, Colorado Commission on Higher Education

Implications

The Economic Base and Work Force factors analyzed above are the foundations for economic development success. As demonstrated, different communities have different strengths, but some general conclusions can be drawn about the corridor:

- Communities along the corridor, including the metropolitan areas, are relatively small, and economic development strategies need to be scaled accordingly.
- Several communities are growing rapidly, which suggests a different set of economic development issues than for the communities that are not growing or are shrinking.
- Income and wages are both well below the US average in most communities.
- Employment in the corridor is more heavily farm- and transportation-oriented, and less manufacturing- and services-oriented than the US as a whole.
- Workforce issues are critical. Most communities would be perceived to have limited labor pools, with small populations and low unemployment. Unemployment is often low because of declines in population, rather than as a sign of economic vitality. Most locations seek to increase jobs in order to keep people in their communities. The problem is especially acute with college educated citizens who leave the area because there are not sufficient local opportunities.
- The charts below attempt to summarize the key factors examined. The first chart organizes data geographically, from north to south, as done in previous charts and tables. Dark blue indicates the county is among the top 3 within the Corridor. Aqua indicates it is above the Corridor average.

SUMMARY OF STATISTICS: NORTH-SOUTH

	Population	Income	Farm	Manufacturing	Services	T&U
Denver, CO						

Lincoln, CO						
Prowers, CO						
Cimarron, OK						
Sherman, TX						
Moore, TX						
Potter, TX						
Randall, TX						
Swisher, TX						
Hale, TX						
Lubbock, TX						
Lynn, TX						
Dawson, TX						
Howard, TX						
Ector, TX						
Midland, TX						
Tom Green. TX						
Sutton, TX						
Val Verde, TX						
Maverick , TX						
Webb, TX						

Key: Dark blue: Top 3; Aqua: Above corridor average

- A more useful arrangement is to organize the data by population, from the smallest to the largest community. In this way, several key trends appear.

SUMMARY OF STATISTICS: BY POPULATION

	Population	Wage/Job	Income	Farm	Manufacturing	Services	T&U
Cimarron, OK							
Sherman, TX							
Sutton							
Lincoln, CO							
Lynn, TX							
Swisher, TX							
Prowers, CO							
Dawson, TX							
Moore, TX							
Howard, TX							
Hale, TX							
Val Verde, TX							
Maverick, TX							
Tom Green, TX							
Randall, TX							
Potter, TX							
Midland,							

TX							
Ector, TX							
Webb, TX							
Lubbock, TX							
Denver, CO							

Key: Dark blue: Top 3; Aqua: Above corridor average

- The smallest communities tend to have farm-based economies, with wages on the low end of the scale, but income on the higher end.
- Manufacturing tends to be more concentrated in the small- to mid-size communities. High wages are not necessarily linked to strength of manufacturing employment.
- The larger, urban areas tend to have higher wages and income and greater concentrations of service and transportation employment.
- The implication of this analysis is that economic development strategies should be segmented to serve each of these three groupings and that the Corridor will have different effects in each segment. Population and economic base are likely to be more important factors than geography (in most cases) in defining those strategies. We believe the Corridor Coalition should organize its economic development efforts around these segments.
- An exception will likely be the three border counties, which have a unique position and special assets that will drive their economic development strategies.

INFRASTRUCTURE

Beyond economic base and work force, infrastructure affects the ability of companies to locate, stay, or expand in a location. Specifically, companies focus on the availability, reliability and costs of transportation and utility service to support business operations.

Below we have summarized the critical transportation assets for each community.

TRANSPORTATION ASSETS

	HIGHWAYS	RAIL	AIRPORTS
Limon, CO	I-70, US 24, US 40/287	Union Pacific (grain storage facilities) Kyle RR	Limon Municipal Airport (no commercial service)

Lamar, CO	US 287/385, US 50	BNSF Seeking short line	Lamar Municipal Airport (no commercial service)
Boise City, OK	US 287, US 56/64, US 385	BNSF goes through	City-owned airport (no commercial service)
Stratford, TX	US 54, US 287	Union Pacific BNSF Connecting spur	--
Dumas, TX	US 87/287	BNSF, with 2 local spurs Short line	Moore County Airport (no commercial service)
Amarillo, TX	I-40, I-27, US 60, US87/287	BNSF (2 main lines) and Intermodal Facility	Amarillo International Airport
Canyon, TX	I-27, US 60, US 87	BNSF, heavy traffic, no stops	Access to Amarillo; several small private airports in area
Tulia, TX	I-27, US 87	BNSF (daily switching service; some sidings)	Swisher County Airport (no commercial service)
Plainview, TX	I-27, US 87, US 70	BNSF (switching yard)	General aviation airport (no commercial service)
Lubbock, TX	I-27, US 87, US 62/82, US 84	BNSF Short line	Lubbock International Airport
O'Donnell, TX	US 87	--	--
Lamesa, TX	US 87, US 180	--	Small local airport (no commercial service)
Big Spring, TX	I-20, US 87	Union Pacific (spur to industrial park)	McMahon-Wrinkle Airport (no commercial service)
Midland, TX	I-20 La Entrada al Pacifico	Union Pacific	Midland International Airport
San Angelo, TX	US 87, US 67, US 277	Texas Pacifico	Mathis Field

Sonora, TX	I-10, US 277	--	Y (no commercial service)
Del Rio, TX	US 90, US 277 Del Rio-Ciudad Acuña International Bridge La Linda Bridge	Union Pacific (freight switching, piggyback service available)	Del Rio International Airport (no commercial service)
Eagle Pass, TX	US 277, US 57 Also NAFTA Superhighway member Eagle Pass Bridge-Piedras Negras I and II	Union Pacific Eagle Pass Rail Crossing	Maverick County Memorial International Airport (no commercial service)
Laredo, TX	I-35, US 83, US 59; Mexico route 85 Part of several NAFTA corridors Gateway to the Americas Bridge Juarez-Lincoln Bridge Laredo-Colombia Solidarity Bridge World Trade Bridge	Union Pacific (1200 rail cars/day) Laredo-Nuevo Laredo Railroad Crossing Texas Mexican Railway (rail crossing)	Laredo International Airport

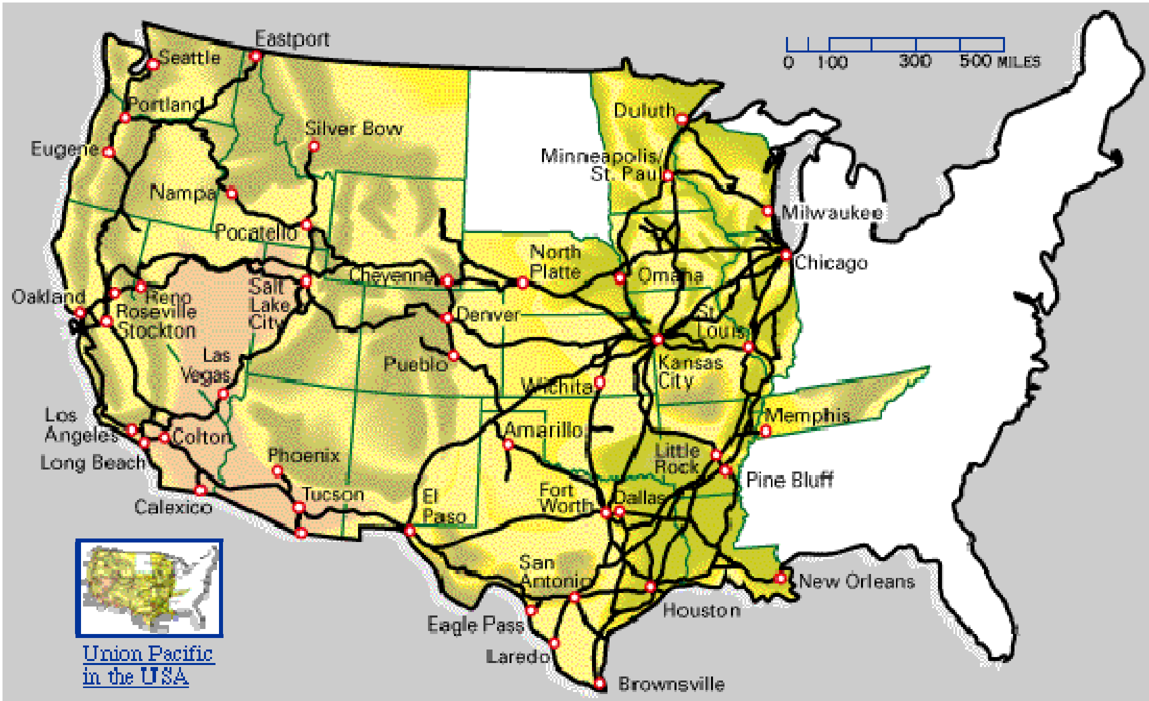
Source: Community interviews and web sites, North American Transportation Figures,

- Excluding I-27 from consideration, several corridor communities are on Interstates, which is likely to generate more logistics/distribution opportunities and greater manufacturing consideration:
  - Limon: I-70
  - Amarillo: I-40
  - Big Spring and Midland: I-20
  - Sonora: I-10
  - Laredo: I-35
- Most other communities also sit on other east-west routes that may create regional opportunities as well. Only a few, Dumas, Tulia, and O'Donnell among those

examined here, are not. In these few cases, they are less likely to develop as distribution nodes, but may still see transportation opportunities.

- Most communities are served by rail (O'Donnell and Lamesa appear to be exceptions). The northern section above Lubbock tends to be served by BNSF, while the southern section tends to have Union Pacific rail service.
- Amarillo has a BNSF Intermodal facility, the only one along the corridor.
- Stratford offers a spur between BNSF and Union Pacific lines.
- Most communities, but not all, have spurs, switching facilities, or other special facilities that make the rail service an active asset. In some communities, the rail goes through, but is otherwise not part of the community infrastructure.
- Both Eagle Pass and Laredo have rail crossings into Mexico.

UNION PACIFIC RAIL LINES


Eastport
Seattle
Portland
Eugene
Silver Bow
Nampa
Pocatello
Duluth
Minneapolis/
St. Paul
Milwaukee
Chicago
Oakland
Reno
Roseville
Stockton
Salt
Lake
City
Cheyenne
North
Platte
Omaha
Denver
St.
Louis
Las
Vegas
Pueblo
Kansas
City
Wichita
Los
Angeles
Colton
Long Beach
Calexico
Phoenix
Tucson
El
Paso
Amarillo
Little
Rock
Pine Bluff
Memphis
Fort
Worth
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Laredo
Brownsville
Houston
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0 100 300 500 MILES
Union Pacific
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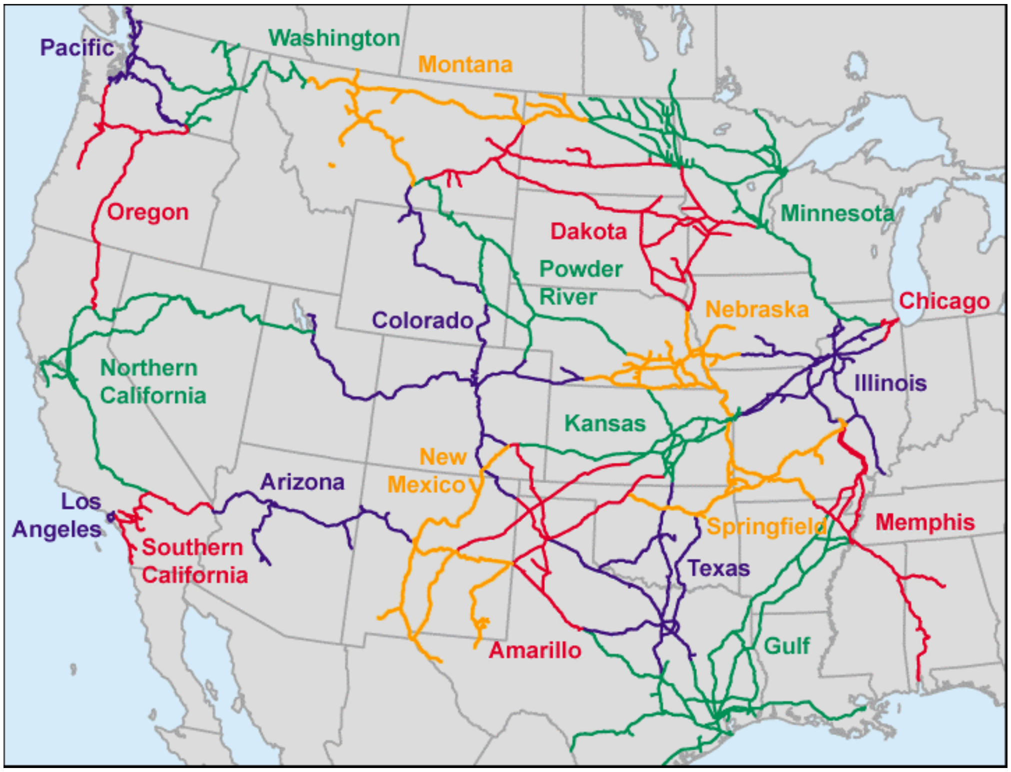
BNSF RAIL LINES



- Air service is an ongoing issue for the corridor region. Amarillo, Lubbock, Midland, and Laredo have international airports with regular commercial service, but relatively limited direct service nationally. The first three are classified as small hubs, with Laredo a passenger non-hub.
  - Lubbock was ranked #104 in the nation by enplanements in 1999, according to the FAA;
  - Midland was ranked #112;
  - Amarillo was ranked #121;
  - Laredo was ranked #228;
  - Laredo is the only airport of the group ranked as a qualifying cargo airport in 1999 according to the FAA, ranking 75th in the nation by landed weight of cargo aircraft.

- In addition to transportation infrastructure, we gathered data on two utility factors: water and telecommunications. We focused on these two factors based on preliminary indications that there were supply or service issues in Corridor communities that could affect business development.

- We inquired about water and wastewater capacity to determine if this issue could affect business growth and development. In general, water is more of a concern in the northern portion of the Corridor, especially between Amarillo and Denver, although the situation varies by community. While not necessarily an immediate problem, heavy water users would likely not locate in this region. With a few exceptions, the rest of the Corridor communities described their water supply in positive terms.

- Telecommunications service is increasingly important to all types of businesses, especially the fast-growing professional services and logistics/transportation sectors. Most, but by no means all, of the Corridor communities report that they have fiber optic cable in the community. While this does not necessarily mean easy access for businesses and residents, many also report that DSL service, high-speed cable modems, T-1 and other services are available. The urban areas, especially Amarillo and Lubbock, offer a full-range of services that appears to be able to meet the needs of heavy telecommunications users.

Implications

- Highway transportation, especially north-south, has been a relative weakness of the region. This is one of the reasons the Ports-to-Plains Corridor is so important. It will help link the region internally and externally.

- East-west access through many communities is strong, and this asset will become more valuable when combined with improved north-south transit.

- Rail infrastructure exists and will be valuable for several of the economic sectors that are strong in the corridor, including agriculture and transportation/distribution. While several of the communities have and may take advantage of rail service, the bifurcated nature of rail service along the corridor makes it seem unlikely to create Corridor-wide benefits directly related to Ports-to-Plains.

- Air service is a relative weakness for the Corridor. Strong air hubs can support and attract professional services firms, but the small hubs along the Corridor may not be sufficient to generate this type of benefit. The limited air cargo operations, except in Laredo, also suggest limited benefits at the airports.

INSTITUTIONS AND FACILITIES

- We have also reviewed select other community assets that we believe are relevant to both overall economic development and likely opportunities that will develop related to the Ports-to-Plains Corridor. This list is based primarily on information provided during community interviews. The community assets include:

- Higher education institutions
- Trade related offices and facilities
- Empowerment Zones and Enterprise Zones
- Major federal offices and facilities

INSTITUTIONS AND FACILITIES

	UNIVERSITIES AND COLLEGES	TRADE-RELATED	EZ/EC	SELECT FEDERAL OFFICES
Limon, CO	Morgan Community College (branch)		East Central Enterprise Zone (state)	Resource Conservation and Development
Lamar, CO	Lamar Community College		Southeast Colorado Enterprise Zone (state)	USDA offices National Grasslands
Boise City, OK				USDA conservation district office
Stratford, TX				Farm service agency office
Dumas, TX	Amarillo College (branch)	Part of pending FTZ application with Amarillo		USDA office, soil conservation
Amarillo, TX	Amarillo College Texas Tech School of Medicine, Pharmacy, and Allied Health	US Customs Port of Entry FTZ application pending	Enterprise Zone (state)	Pantex, Department of Energy USDA Texas Rural Development Office
Canyon, TX	West Texas A&M University			
Tulia, TX		Part of pending		USDA NRCS

		FTZ application with Amarillo		
Plainview, TX	Wayland Baptist University			
Lubbock, TX	Texas Tech Texas Tech University Health Sciences Center Lubbock Christian University	US Customs Port of Entry Northwest Texas International Trade Center	3 enterprise zones (state) Reese defense adjustment zone Applying for federal EZ	USDA NRCS USDA Texas Rural Development Manager
Lamesa, TX	Howard College (branch)			USDA Farm Service Agency
Big Spring, TX	Howard College		Enterprise zone (state)	VA Hospital VA Nursing Home Federal corrections facility
Midland, TX	Midland College	US Customs Port of Entry FTZ #165 Mexico Consular Office		Western Federal District Court
San Angelo, TX	Angelo State University Howard College – San Angelo	Customs Aviation Interdiction Program Branch Office	Enterprise zone (state)	Goodfellow AFB
Sonora, TX			Enterprise zone (state)	
Del Rio, TX	Southwest Texas Junior College Sul Ross State University Rio Grande College Park College	US Customs Port of Entry FTZ #97 Mexico Consular Office		Laughlin AFB

Eagle Pass, TX	Southwest Texas Junior College Sul Ross State University Rio Grande College	US Customs Port of Entry FTZ #96 Mexico Consular Office EPI Center	Middle Rio Grande (Futuro) Enterprise Community	Customs INS DEA Border Patrol
Laredo, TX	Texas A&M International University Laredo Community College	US Customs Port of Entry Customs Management Center FTZ #94 Mexico Consular Office		FBI Customs Shore Patrol (68 federal offices)

Higher Education

- The Corridor has several colleges and universities. Texas Tech is the biggest institution by far and is an extremely valuable asset for both Lubbock and the region. The university is an economic driver of itself, but universities also help generate a quality of life that tends to attract professionals and young people to a community. There are also other important effects, including but not limited to, research capacity, business support activities, ongoing education for professionals, and regional economic development mission.

- Though far smaller, West Texas A&M, Angelo State, and Texas A&M International, can play similar roles in their communities.

Trade-Related Assets

- We also examined trade-related assets to determine if any community was particularly well-positioned to take advantage of increased trade along the Corridor.

- In addition to the three border communities, Amarillo, Lubbock, and Midland are Customs Ports of Entry. Since increased trade traffic is anticipated to largely be truck-based coming in through the border communities, this particular designation may not add much value in the Corridor context, but it is a valuable asset in general.

- The three border communities have free trade zones (FTZs). The only other existing FTZ that we have been able to identify is in Midland. Amarillo is currently in the process of applying for a FTZ.

- There appear to be limited business support facilities or offices to assist companies importing or exporting. The award-winning North Texas International Trade Center at Texas Tech is a notable exception.

- Mexico has consular offices in Midland, Del Rio, Eagle Pass and Laredo.

Empowerment Zones and Enterprise Zones

The federal Empowerment Zone/Enterprise Community (EZ/EC) program is part of an overall Community Empowerment initiative begun in 1993. The objective is to help both rural and urban communities at designated poverty levels to generate economic opportunity and sustainable community development. Communities submit applications for approval, and competition can be rigorous. There have been two rounds of approvals, and a third will occur in fall 2001.

The only EZ/EC program we have been able to identify along the Corridor is the Middle Rio Grande (Futuro) Enterprise Community (EC), which includes Eagle Pass. The EC also includes sites in Dimmit, Zavala, Maverick, Uvalde and LaSalle Counties. Key issues for the EC are sustainable growth, workforce development, and drawing industry to match the work force. From the 2000 Annual Report:

> With the border regions finally drawing long-awaited and desperately needed attention, FUTURO's location has allowed the organization to capitalize on programs aimed at long-term investment. Such programs include the EPI Center to be located in Eagle Pass and funded in part by the U.S. Department of Commerce and the City of Eagle Pass, that will provide international business opportunities and serve as a business incubator and "Keeping the Doors Open," a program funded in part by the U.S. Department of Education and the U.S. Department of Labor through the local workforce board and aimed at narrowing the "digital divide" that exists in the FUTURO region – a region that is comprised of a majority Hispanic population that meets its challenge of grinding and pervasive poverty head-on.

Lubbock is submitting a Round III application for EZ/EC designation in 2001.

[1] 2000 Annual Report Executive Summary, FUTURO Enterprise Community, http://www.ezec.gov/00_Exec_Summaries/futuro.html

Most states also have their own Enterprise Zone programs, and several corridor communities participate in these efforts. Program features vary from state to state, but key features generally include tax breaks for businesses that locate there. For example, in Colorado, enterprise zone tax credits include but are not limited to:

- Three percent investment tax credit
- $500 job tax credit
- Double job tax credit for agricultural processing
- R&D tax credit
- Credit to rehabilitate vacant buildings
- Ten percent job training credit
- Exemption from state sales and use tax for manufacturing and mining equipment
- Local government tax incentives

There is decidedly less enthusiasm among the Texas communities for the enterprise zone program than we heard in Colorado. While a full separate report can be performed on this topic alone, it appears that the emphasis on local, rather than state, incentives and an administratively more complex system may make the Texas program a less potent business development tool. However, benefits under the Texas program include:

- State sales and use tax benefit
- State franchise tax reduction
- Several (21) local option benefits, including tax abatements, infrastructure development, training, and others.

Federal Offices and Facilities

We examined the presence of federal offices and facilities in corridor communities primarily to determine if any are sufficient to serve as a catalyst to economic development.

Many communities have US Department of Agriculture (USDA) offices, many of which are part of the Natural Resources Conservation Service (NRCS). USDA also has Rural Development managers or offices in corridor communities, including Limon, Amarillo, and Lubbock. Opportunities available through this agency will be addressed in the next section.

Beyond that, two communities have Air Force Bases (AFB): San Angelo's Goodfellow AFB and Del Rio's Laughlin AFB. Big Spring has a strong Veterans Administration presence. The border communities have customs and law enforcement agencies. While these are strong community assets, at this time we do not envision strong spin-offs or benefits that would be directly related to the Ports-to-Plains Corridor development. The exception is at the border locations where an enhanced federal presence that facilitates trade movement is of great benefit.

ECONOMIC DEVELOPMENT ACTIVITIES

We asked communities to describe their current economic development programs so that we could understand their goals and activities, as well as how the Ports-to-Plains initiative fits with those goals. It is important that Ports-to-Plains complement and support existing economic development efforts, not work at cross purposes.

The following chart summarizes inputs from each community on target markets and important economic development programs and projects they have been pursuing. While communities were generally very open and willing to share information, they were more reticent to provide detailed target market information. Most of the sectors listed below are very broad. Business attraction is very competitive by its nature, and it appears to us that communities are not yet prepared to share marketing information. By implication, they are also likely not yet ready to commit to joint marketing of their communities in the Corridor context. In this sense, identifying target markets for the Corridor to pursue may be premature.

OVERVIEW OF ECONOMIC DEVELOPMENT EFFORTS

	TARGET MARKETS	PROGRAMS AND PROJECTS
Limon, CO	Distribution centers	Electric generating facility Transportation support services (such as truck stops)
Lamar, CO	Value added agriculture Dairy industry Manufacturing Distribution centers	Potential wind farm Coal fired generation plant Scenic byways (Santa Fe Trail)
Boise City, OK	Distribution Small manufacturing ops. Trucking Value-added agriculture	Transportation support services (such as truck stops) Bond issue for prison
Stratford, TX	Distribution Dairy industry Transportation support services	Farm expansion Small business support
Dumas, TX	Food processing	Developing business park

	Distribution Call centers Small/light manufacturing Value-added agriculture Transportation support services	Window on the Plains museum
Amarillo, TX	Manufacturing Technology companies Distribution	New business park Call centers
Canyon, TX	Transportation support services	Tourism promotion Downtown revitalization
Tulia, TX	Distribution Transportation support services	Downtown revitalization High Plains Regional Business Assistance Network incubator New salsa and tortilla mfg. facility
Plainview, TX	Distribution Food processing	2 prisons Corn mills City owned industrial parks
Lubbock, TX	Value-added agriculture Medical/life sciences Light manufacturing Distribution	Workforce development New call center Manufacturing expansion Airport industrial park
O'Donnell, TX		Business retention and development
Lamesa, TX	Transportation support services Trucking	Retail business retention downtown Prison
Big Spring, TX	Warehousing and transportation Technology firms Medical firms	McMahon-Wrinkle Airport Airpark development
Midland, TX	Manufacturing Customer support Healthcare	New pilots training program with junior college

San Angelo, TX	Plastics Distribution	Business retention
Sonora, TX	Transportation support services Distribution	Multi-Kim location Strong Main Street program
Del Rio, TX	Wholesale trade Transportation Manufacturing	Applying for several grants
Eagle Pass, TX	Tourism	New international trade center New hospital and hotels New casino
Laredo, TX		Distribution facilities Medical and education facilities

Implications

- In general, communities with established higher education facilities are better positioned to attract high-value, high-salary, and high-growth professional services operations and employees.

- To encourage or take advantage of increased trade opportunities in the region, it seems likely that more trade-based resources will be needed to support local businesses. Options may include a branch of key federal offices that facilitate trade. Currently, relevant Department of Commerce offices serving the region are based in Dallas, while the Export-Import Bank office is in Houston.

- Empowerment Zones and Enterprise Zones can be useful for business development. There may be opportunities for these programs to be directly applied to Ports-to-Plains related projects to support growth along specific areas of the corridor.

- In general, the federal presence in most locations is limited and not likely to serve a catalytic role.

- Communities have diverse economic development objectives, ranging from downtown revitalization to attraction of major manufacturing investment. Many communities were reluctant to share target market information. Both factors suggest that a Corridor-wide marketing initiative is not yet appropriate.

CATALYST PROJECTS: FEDERAL PROGRAMS

A major goal of this study is to help Corridor communities access federal funding to support corridor transportation enhancements and overall economic development. While transportation is the priority, this section will also address relevant federal economic development programs that may be of interest to Corridor communities. While the latter may not be considered major catalysts, they can be extremely useful for community planning, development, and business support projects. The Ports-to-Plains Corridor Coalition can play a useful role in helping corridor communities, especially those with limited grant-writing experience, access funds for which they are eligible.

This section covers:

- Highway construction projects
- Intelligent Transportation Systems (ITS)
- Rural Economic Area Partnership (REAP) Zones
- USDA Rural Development programs
- US Department of Commerce, Economic Development Administration (EDA) programs

The research for this portion of the report was largely completed prior to September 11. As the US Congress struggles with a new set of priorities, the effect on current programs and requests for funding is not clear. We will continue to monitor and advise on the situation. We present here our recommendations as they stood prior to that date.

HIGHWAY PROJECTS

To date the Ports-to Plains Coalition's primary focus has been to secure Corridor designation, which was accomplished in June 2001. The next step is to secure funding for recommended highway improvements. In this section, Commonwealth discusses an approach for garnering federal funding for Corridor-related highway construction projects. As stated in our scope of work, our purpose is to identify two highway projects per congressional district along the Ports-to-Plains route.

To accomplish this goal, we began by identifying ongoing and desired highway projects related to Ports-to-Plains through community interviews and state Department of Transportation resources. We then placed these projects against the backdrop of funding scenarios at the federal level. We conclude with a set of preliminary recommendations on pursuing highway projects in concert with the congressional delegation.

Background

The basis for the Corridor's highway construction is the Ports-to-Plains Feasibility Study completed earlier this year. The purpose of this study was "to determine the impacts and feasibility of highway improvements between Denver, Colorado and the Texas/Mexico border, via the existing IH 27 corridor between Amarillo and Lubbock, Texas. This study involved a detailed and comprehensive feasibility analysis of various alternative highway alignments considering the entire corridor limits between Denver and the Texas/Mexico border." The study analyzed traffic, engineering and environmental issues, travel efficiency, and economic development benefits.

While "(a) continuous four-lane highway was not found to be feasible along the entire corridor" about one-third of the Amarillo-Denver portion of the route is currently or is programmed to be widened to four lanes. Approximately 46% of the Lubbock-Laredo portion of the route is currently or is programmed to be widened to four lanes. Clearly, then, there is significant need for additional planning and funding. Further, while several projects are in state transportation plans, they may lack either priority or designated funding, and accelerating these projects would be beneficial to the Corridor.

Corridor Community Projects

The Commonwealth approach to this portion of the project was to interview community leaders along the Corridor to understand their priority highway projects for Ports-to-Plains. We believe it would be inappropriate to attempt to propose local highway funding priorities otherwise. By definition, then, the list is limited to projects in communities on our interview list. The 2000 federal highway funds listed below are provided as a reference point and are not necessarily related to Ports-to-Plains projects.

FEDERAL HIGHWAY PLANNING AND CORRIDOR PROJECTS

CITY	2000 FEDERAL HIGHWAY PLANNING & CONSTRUCTION GRANTS*	PORTS-TO-PLAINS HIGHWAY PROJECTS
Denver, CO		I-70 from Limon to Denver has been rebuilt over the last 6 years
Limon, CO	$4,468,678	Upgrade of US 287 to concrete Super 2 highway with 12 ft. shoulders from OK to Limon has been identified as a state strategic project to be implemented over the next 6 years; would like to accelerate timetable
Lamar, CO	$325,008	See US 287 upgrade above.

Boise City, OK	$548,816	Need state commitment for improvements; repairs and resurfacing of US 287. Seek federal funds for reliever route for US 287 around town; current route through town square has safety and congestion issues.
Stratford, TX	$3,961,781	Rehabilitating US 287 road surface; to be completed 8/01
Dumas, TX	$133,846	Possibility of reliever route or loop on US 87/287 Installing concrete pavement on US 87; to be completed 11/01
Amarillo, TX	$3,801,762	Reconstructing I-40/I-27 interchange
Tulia, TX	$2,031,349	I-27 bridge repair scheduled for completion 8/01 I-27 concrete overlay and joint repair to be completed 8/01
Plainview, TX	$89,362	I-27 bridge repair scheduled for completion 8/01
Lubbock, TX	$6,818,839	Seeking federal funding for a Ports to Plains Corridor Management and Development Plan Bridge repair on I-27 to be completed 8/01 Rehabilitation of US 87 from 82nd St. to FM 1585; to be completed fall 2001
O'Donnell, TX	$8,246,334	Rehabilitation of US 87; to be completed ½
Lamesa, TX	$657,205	Working on traffic diversion route on US 87 east of town between prison and airport. Widen travel lanes and add shoulders on FM 837 from US 87 in Lamesa to US 180 in Key
Big Spring, TX	$11,935,079	Seeking federal funding for truck relief route around Big Spring for US 87

Midland, TX	$5,140,920	Working on SH 349 bypass around Midland, interchange upgrades, and additional lanes from Midland to Lamesa Overlap with La Entrada al Pacifico corridor
San Angelo, TX	$ - 785,661	Main completion of US 87 in 2010 Working on a bypass but the route has not been established Completion of loop around city to 67 should be finished in 3 years
Sonora, TX	$1,096,028	Study for US 277 reliever route with TXDoT, using local funds for study but will rely on other funds for construction
Del Rio, TX	$744,382	Phase I of loop around city breaks ground in 2003 Want an additional bridge to Mexico – 3rd pt of entry US 277 Loma Alta reconstruction project substantially completed 8/01
Eagle Pass, TX	$5,182,831	Expansion of US 277 to US 83 Major expansion of 277 north to 5-lane highway
Laredo, TX	$30,190,818	

Sources: *US Census Governments Bureau, 4/01, by County; Community interviews, 8/01; www.dot.state.tx.us.

Highway Projects by Congressional District – Preliminary List

Reorganizing the data in the above chart by congressional district suggests the following priority projects:

Colorado: 4th District: Bob Schaffer (R)

- Upgrade of 287 to concrete Super 2 highway from Oklahoma to Limon. This project is already in the state strategic plan to be completed over the next 6 years. It would be advantageous to accelerate construction.

Oklahoma: 6th District: Frank Lucas (R)

- Funding is needed for 287 improvements including repairs and resurfacing through the panhandle.

- Boise City needs funding to study and build a relief route to take 287 around Boise City. Currently truck traffic runs through the town square, which is hard to navigate and potentially dangerous to schools, shops, and offices near the town square.

Texas: 19th District: Larry Combest (R)

- Dumas seeks a reliever route, a 287 spur west of Dumas
- Midland is working on a SH 349 bypass around Midland, interchange upgrades, and additional lanes from Midland to Lamesa

Texas: 13th District: Mac Thornberry (R)

- Communities in this district did not report any major highway projects for which they are seeking federal funds.

Texas: 17th District: Charlie Stenholm (R)

- Lamesa is working on a traffic diversion route on 87 directly east of town.
- Big Spring is seeking a truck relief route around Big Spring for US 87; $8 million has been requested for project.

Texas: 21st District: Lamar Smith

- San Angelo expects the main completion of 87 by 2010. It is also working on a bypass, but the route has not been established.

Texas: 23rd District: Henry Bonilla (R)

- Sonora is conducting a study for a reliever route with TXDoT. It is using local funds for the study but will rely on other funds for the actual project.
- Del Rio wants an additional bridge to Mexico, providing a third point of entry.
- Eagle Pass is working on an expansion of 277 South to 83 and a major expansion of 277 North to a 5-lane highway.

In addition Congressman Combest has taken the lead on obtaining funding for the Corridor Management Plan through an earmark in this year's transportation appropriations bill.

Federal Funding Issues

The key to obtaining funding for these (or other) priority projects is to *unite as Corridor* behind a focused set of priorities. Ports-to-Plains communities need to present a united front, at least before individual congressional offices and preferably as a whole before the set of congressional leaders that represent the Corridor. Ports-to-Plains funding is not as likely to succeed if each community approaches congressional leaders seeking funding for individual projects.

There are several reasons this is the case:

First, it is difficult for individual Representatives to choose among projects in their districts, and influence can be diminished if spread over a long list of projects. They are better able to rally support among other members if they can focus their attention on a focused set of priority projects.

Second, the Ports-to-Plains Corridor will gain more traction immediately and for the long-term if it is perceived that there is a plan for development and that communities support that plan. Individual communities pursuing individual projects outside this context do not provide this type of leverage. The Corridor loses, and individual communities who cannot get their projects funded because they are not perceived to be part of a larger plan also lose.

Third, working as a coalition with a coalition of congressional leaders increases the impact of the request. No longer is it perceived as one location trying to get more money; it is about an entire region striving to increase development opportunities. A coalition that is perceived to have broader interests than those of the individual community can be very powerful in generating support.

A related point is that the coalition must be able to provide the rationale for its funding request. Congressional leaders who can explain to their colleagues why a project is important will be more successful in garnering support. This is especially true for a relatively new project like Ports-to-Plains where the economic development benefits may not be obvious to those asked to support funding. This report is a first step in describing both the need and potential for economic development from Ports-to-Plains. More needs to be done to continue to analyze and quantify the benefits, especially as planning proceeds.

Finally, there are some tactical considerations. During the next fiscal year, it will be appropriate to request funds in the Transportation Appropriations bill for relatively small projects ($1-5 million). The Corridor also needs to position itself and establish a C*orridor-wide strategy* for the 2003 authorization of the follow-on to TEA-21.

In sum, the corridor needs to act in a united manner to pursue priority projects, provide the rationale for supporting those projects, and position itself for the near-term appropriations process and 2003 reauthorization of TEA-21.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

In addition to highway construction, the Ports-to-Plains Corridor also requested us to examine ITS projects that would support Corridor development.

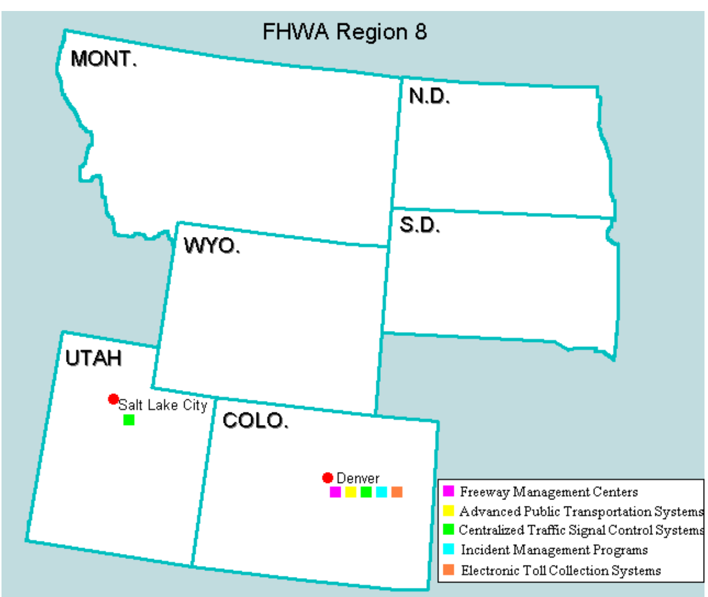
What is ITS?

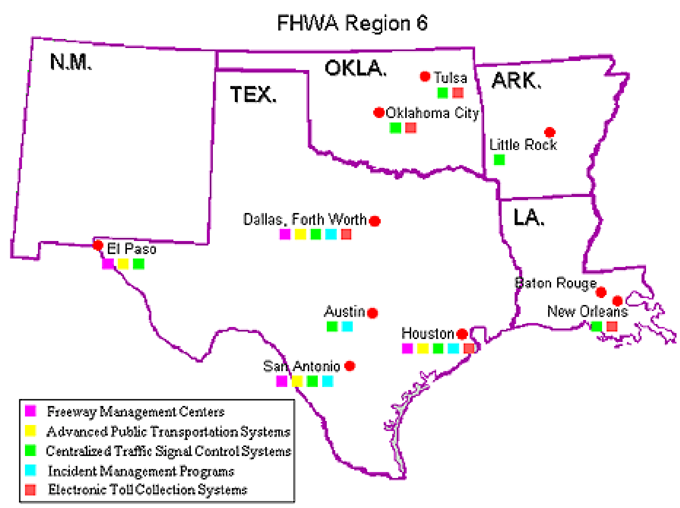
ITS is about applying information and communications technologies to transportation issues. According to the Department of Transportation, the national ITS program "aims to use advanced technology to improve the efficiency and safety of our Nation's surface transportation system."

The ITS program has a dual focus: intelligent infrastructure and intelligent vehicles. Intelligent infrastructure is about satisfying the transportation needs of metropolitan areas, rural areas and the trucking industry. The intelligent vehicles program focuses on safety and information systems for cars, trucks, buses, and trains. We will address the infrastructure component of the ITS program in this report.

There have been several ITS projects in Texas since FY92 totaling $26.95 million through FY01, according to the US Department of Transportation. These projects have been concentrated in Austin, Dallas, El Paso, Fort Worth, Houston, and San Antonio. There have also been several statewide projects, including Rural ITS, Commercial Vehicle Operations, Mexico Border, and statewide integration projects.

However, as the summary map below indicates, there has not been any major ITS activity in most of west Texas or the Colorado and Oklahoma portions of the corridor.





Source: US Department of Transportation, Intelligent Transportation Systems

We have been able to identify only five projects in corridor communities[2]:

- A weather and pavement condition monitoring program in Amarillo
- Traveler warning (especially for commercial vehicles) on the I-40 corridor through the Texas panhandle
- ITS planning studies for Laredo, Del Rio and the Rio Grande Valley area
- A freeway traffic management system and Transportation Management Center in Laredo.
- Port of Entry (POE) Automation at several Colorado locations, including I-70 at Limon. These projects have installed devices in the roadway and software at the POE for weigh-in-motion and/or automated vehicle identification.

We have not been able to identify any ITS projects in the Oklahoma panhandle.

There are several categories of Rural ITS projects. The US Department of Transportation's Intelligent Transportation Systems Projects Book 2001 currently categorizes projects in the following development tracks:

- Surface Transportation Weather and Winter Mobility
- Emergency Services
- Statewide/Regional Traveler Information Infrastructure
- Rural Crash Prevention
- Rural Transit Mobility
- Rural Traffic Management
- Highway Operations and Maintenance
- Integrated Systems

[2] ITS in Texas (5/01), www.its.dot.gov/staterpt.TX.HTM

The Texas Transportation Institute at Texas A&M University has identified two major issues for the application of ITS technologies along rural trade corridors that would primarily fall under the Emergency Services category:

- Rural hazardous material transport and emergency response
- Jurisdictional and institutional issues

The Institute makes a very compelling case for addressing the hazardous material transport issue:

> Previous research has indicated the lack of an origin-destination database for haz mat transport and the difficulty with tracking these cargoes from origin to destination. A recent study of the haz mat issue at Laredo indicates that eight percent of those trucks surveyed were transporting hazardous material. This figure is probably considerably lower than the actual number . . . .
>
> While the border crossing communities are fairly well equipped and prepared to respond to haz mat transport incidents, the rural communities along the South Texas trade corridors are at risk. According to a recent survey conducted by the Intelligent Transportation Systems Research Center of Excellence at the Texas Transportation Institute, many of the rural trade corridor communities that have responded have formal haz mat response plans in place . . . . However, none of the departments have any means of tracking or monitoring haz mat shipments that regularly pass through their communities. All respondents agreed that having the capability to monitor the transport of haz mat cargo through ITS technology would be a valuable service to their communities.[3]

The paper goes on to describe the need for rural communities to become involved in the partnerships that are developing around ITS technologies, but jurisdictional and institutional barriers make this difficult.

Commonwealth team discussions with rural ITS practitioners regarding available funding and the history of successful projects confirm that focusing on safety issues is a good strategy. Beyond haz mat, related safety issues that ITS can help address are communications (especially to facilitate emergency response), incident management, and corridor-wide coordination and communication.

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[3] "Future Applications of ITS Technologies for Rural Texas Trade Corridors," Eric Lindquist, Texas Transportation Institute, Texas A&M University.

Commonwealth recommends beginning by pursuing ITS initiatives under The Emergency Medical Services (EMS) development track. This track includes:

> . . . systems which improve emergency response to serious crashes in rural areas including technologies that automatically mobilize the closest police, ambulances, or fire fighters in cases of collisions or other emergencies, even in the most remote locations . . . . ITS applications such as incident notification (cellular and Mayday), advanced hazard warning systems, advanced traveler information services, and in-vehicle crash avoidance systems, are some of the ITS applications . . . which can impact the safety and mobility of rural travelers."[4]

Commercial Vehicle Operations (CVO)

CVO may also be an appropriate ITS category for the Corridor to consider. CVO's focus is on integrating technology applications for improving commercial vehicle safety, enhancing efficiency, and facilitating regulatory processes.

Under the TEA-21 ITS Deployment Program, the Commercial Vehicle Infrastructure Program has the Commercial Vehicle Information Systems Network (CVISN) as its key initiative. It is a system of information systems that link the nodes supporting communications among carriers and agencies. "CVISN provides a standard communications infrastructure that enables existing and new data collection and management systems to exchange information efficiently."[5] The three program areas are Safety Information Exchange, Electronic Credentials Administration, and Electronic Screening. CVISN is striving to establish a fully deployed and integrated national program.

Texas CVO projects have included the following

- Participated in a multi-state ITS/CVO institutional issues study on use of information technology to improve trucking regulation and enforcement. TxDOT has elected not to participate in the follow-on phase to define the national CVO system.

[4] "Intelligent Transportation Systems (ITS) Projects Book 2001," US Department of Transportation, p. 330.

[5] The TEA-20 ITS Deployment Program Interim Report 2000, p. 4.

- The Heavy Vehicle Electronic License Plate (HELP)/Crescent Program was a multi-state, multi-national effort to design and test a commercial vehicle monitoring system similar to what is now PASS or the Port-of-Entry Advanced Sorting System. By incorporating weigh-in-motion, automatic vehicle identification/classification, and on-board computer technologies, this system allows legal trucks to bypass weigh stations and ports-of-entry through the network, resulting in savings for both the carrier and port personnel.

While it appears that many decisions regarding CVO ITS programs are taken at the state or federal level in support of a national architecture, there may be specific opportunities to implement programs along the Ports-to-Plains Corridor. One concept would be to develop an inland customs facility that pulls certain functions relating to truck traffic away from the border areas. For example, a truck sealed at an approved facility in Mexico could travel through the border to a Customs destination along the Corridor, avoiding congestion at the border crossings. With ITS it may be possible to track and then inspect the truck to ensure it meets regulatory standards.

ITS Funding

Many ITS projects are funded through congressional earmarks. For example, in one version of the House transportation appropriations bill, Congress earmarked funding ranging from $250,000 - $12,000,000 for 70 ITS deployment projects.

The strategy for obtaining earmark funding for ITS projects is similar to that for highway construction projects. First, it is helpful to establish proof of need. We have been advised that this can range from a basic report that provides relevant data and a project rationale to a very sophisticated study. In the latter category, for example, the CANAMEX trade corridor is conducting a 2-year, $400,000 study on ITS projects alone, while NASCO conducted a $1 million ITS/CVO (commercial vehicle operations) study.

Second, coalitions are helpful. The Ports-to-Plains Corridor Coalition is obviously well-positioned to lead this type of effort, since it represents many communities and organizations. Private sector participation is also considered important for several reasons. One is that private organizations, such as trucking associations, will have important input to guide ITS strategies and will ultimately be critical to successful implementation. Another reason is that private organizations can either contribute to or help access other sources of funding besides the federal government. A private sector match may, in fact, be required for some projects.

A related point is that it is generally useful to work with an organization that has an established ITS funding flow. This is probably true for earmarks, as well as proposals to funding agencies. ITS is a broad program covering many initiatives and agencies. Organizations that know how to navigate the terrain, know what it takes to submit a successful application, and have demonstrated ability to manage programs are valuable partners. The Texas Transportation Institute (TTI) or its regional division focused on rural transportation issues at West Texas A&M University are likely partners.

RURAL ECONOMIC AREA PARTNERSHIP (REAP) ZONES

Looking beyond transportation, Commonwealth has identified an interesting program within the US Department of Agriculture called the Rural Economic Area Partnership (REAP) Zone that has the potential to serve as a catalyst for economic development either throughout the corridor or for segments of the corridor. We believe this program can serve as a catalyst because it provides priority funding for strategic projects in Zone communities.

The REAP Zone initiative was established to address critical issues related to constraints in economic activity and growth, low density settlement patterns, stagnant or declining employment, and isolation that has led to disconnection from markets, suppliers, and centers of information and finance. It would appear to fit the characteristics of many Corridor communities.

REAP Zones are a pilot concept within the US Department of Agriculture's Office of Community Development. They fall within the family of Empowerment Zone/Enterprise Community initiatives. There are currently five zones: two in North Dakota, two in New York, and one in Vermont. Zones are established for ten years.

The concept is to encourage collaborative and community-led economic development. The first step is to develop a strategic plan. There is modest funding available for strategic planning, and USDA will offer technical assistance for both strategic planning and grant applications to other federal agencies.

The other major Zone benefit is priority consideration primarily for USDA but also other federal project funding. As one REAP Zone representative put it, "We compete for funds in a smaller pot." The USDA reports that REAP Zones have obtained over $110 million in funds from government, private sector and non-profit sources.

How are REAP Zones created?

There are three key players in REAP Zones: Congressional representatives, the state USDA Rural Development office, and community economic development organizations. Zones are formally established through Memoranda of Agreement signed by Zone communities, the USDA, and Congressional representatives. However, the five REAP Zones were *initiated* through the efforts of Sen. Dorgan (ND), Sen. Leahy (VT), and Rep. Hinchey (NY) for communities in their districts. We were told directly that ability to implement a REAP zone "depends on political strength."

What are the benefits?

REAP Zone members cite two sets of benefits: strategic planning and project funding.

- The impetus to create an economic development strategic plan involving a wide range of community stakeholders in a region can create important benefits of itself. As one regional official informed us, "coming together at one table" was a significant accomplishment.

- Strategic planning is also an extremely important step in achieving economic goals because it provides a roadmap for activities. Not only does it define where a community or region wants to go, but it describes how to get there. Strategic plans also have critical communications value by helping to create consensus and commitment among community leaders and stakeholders.

- Strategic planning also sets the stage for maximizing the other Zone benefit: obtaining funding. As with the transportation projects above, if there is an established rationale and a strategic plan that a broad range of stakeholders have committed to, it is easier to obtain support and ultimately get funding (especially compared to one-off proposals).

- In addition, if the strategic plan involves key stakeholders from the beginning, there are many sources of support for projects. It is not necessary to build new coalitions each time a community or region has a proposal.

- USDA reports that through local efforts, millions of dollars in state, federal, private and non-profit assistance can be made to flow into Zone areas. Some specific examples of how REAP Zones have been used to access funding are:

- In FY00 the North Dakota REAP Zones received a $615,000 Rural Business Opportunity Grant.

- The North Dakota REAP Zones also were awarded a $915,000 HUD-EDI Special Projects Grant in FY00.

- In February 2001, the Vermont REAP Zone obtained a USDA Rural Development loan guarantee for a $610,000 loan to a manufacturing facility expanding in the area.

- Between 1999 and 2000, Sen. Leahy secured $150,000 from USDA to assist the Vermont group develop its REAP plan and support other economic development efforts.

- The MOU establishing the New York Zones included $50,000 for strategic plan preparation.

- The New York Zones have obtained $3 million in loans and grants for water and sewer development through a REAP set-aside, which was earmarked by Rep. Hinchey.

- While Rural Development projects are the "core of the funding," the program includes partnering with other federal agencies as well as accessing private resources to support economic development.

Implications for Ports-to-Plains

While the REAP Zone concept is extremely attractive, there are several outstanding issues. First, the USDA position on REAP Zones is not entirely clear. Several key positions within the agency remain open, and several policy issues have not been addressed. As a Community Development initiative begun under the last administration, we do not yet know if REAP Zones or similar programs will continue. However, the program has clearly enjoyed bipartisan support, and we believe the opportunity remains open.

Second, we initially envisioned a Ports-to-Plains corridor-wide REAP Zone. This may still be an option, but there are considerable political obstacles, including the need to work with three state USDA officials, several congressional representatives, and potentially hundreds of communities. It may not be physically possible to create a strategic plan that meets USDA requirements for the Corridor. On the other hand, when we initially broached the idea of a multi-state Corridor, it was praised as the type of regional economic development initiative that is sought-after. In either case, whether pursued for the entire Corridor or for segments of the Corridor, we believe it is a promising initiative.

To summarize the benefits we see, REAP Zones would provide:

- Assistance in corridor-wide strategic planning to realize the full economic development benefits of corridor designation;

- Opportunities to obtain significant public and private sector funds to support development efforts;

- Enhanced ability for individual communities (even the smallest jurisdictions) to access funds through the Ports-to-Plains Corridor Coalition; and

- A mechanism to help achieve the Coalition's goals of attracting businesses and supporting local economic development efforts.

In sum, Commonwealth recommends pursuing the concept with congressional representatives and USDA state officials. With initial feedback, the Corridor coalition can then take the lead on developing the concept in whole or in part to serve corridor communities.

USDA RURAL DEVELOPMENT PROGRAM

USDA has a strong presence in Texas and has Rural Development offices along the corridor in Amarillo and Lubbock. There do not appear to be any such offices in the Oklahoma or Colorado Corridor communities. All USDA Rural Development mission area programs are administered by Rural Development field staff.

Rural Development program areas are:

- Rural Business and Cooperative Service
- Housing and Community Facilities
- Utilities
- Community Development/Empowerment

While each of these programs may be of interest to corridor communities, we focus here on Business and Cooperative Service and Community Development/Empowerment as the most directly relevant to the Corridor's economic development objectives. Our purpose is to describe federal-level economic development programs, highlighting those that seem to support local and Corridor-wide economic development objectives. Following is a brief summary of select programs:

Rural Business-Cooperative Service

This section describes Business Programs; Cooperative Programs are not addressed.

The Business Programs office works with the private sector and community-based organizations to provide financial assistance and business planning. It helps fund projects that create or preserve quality jobs and/or promote a clean rural environment. The financial resources are often leveraged with those of other public and private credit source lenders to meet business and credit needs in under-served areas.

Loans and grants are available for financing working capital, real estate construction or expansion, purchasing equipment, establishing a revolving loan fund, establishing a business incubator facility, providing technical assistance for private business, industrial park improvements, and economic development planning.

Special initiatives include:

- <u>Alternative Agricultural Research and Commercialization Center (AARC)</u>: to encourage research and assist with the commercialization of new non-food uses of agricultural commodities.

- Biobased Products and Bioenergy Program: to finance technologies needed to convert biomass into biobased products and biobased energy.

- Value-Added Agricultural Product Market Development: grant program to encourage independent producers of agricultural commodities to further refine these products increasing their value to end users and to establish an information resources center to collect, disseminate, coordinate, and provide information on value-added processing to independent producers and processors.

  To date, $19.6 million in grants have been awarded under the Value-Added program. These grants are for economically viable or sustainable ventures for a variety of agricultural commodities. Grants can be used for feasibility analyses, business plans, marketing plans, or other types of studies. Grants can also be used to establish working capital accounts, to pay salaries and other operating costs, and to purchase equipment and supplies, among other uses.

Office of Community Development

The Office of Community Development (OCD) provides support for rural community development programs through Rural Development field offices across the United States. The Office of Community Development oversees the Empowerment Zone/Enterprise Communities/Champion Community program. The REAP Zones described above are also part of this office.

ECONOMIC DEVELOPMENT ADMINISTRATION, US DEPARTMENT OF COMMERCE

The Economic Development Administration (EDA) mission is to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically-distressed areas of the United States.

The EDA has regional offices serving Corridor communities in Denver and Austin. There are also Economic Development District Offices in the following locations:

- Concho Valley Economic Development District, San Angelo, TX
- Middle Rio Grande Development Council, Carrizo Springs, TX
- Panhandle Regional Planning Commission, Amarillo, TX
- South Plains Association of Governments, Lubbock, TX
- South Texas Development Council, Laredo, TX

In addition, the EDA has funded an Economic Development Center at Texas Tech in Lubbock.

EDA program areas are:

- Public Works and Economic Development

- Economic Adjustment Program
- Research and Technical Assistance
- Partnership Planning Grants for Economic Development Districts, Indian Tribes and Other Eligible Areas
- Short Term Planning Grants to States, Sub-State Planning Regions, and Urban Areas
- Technical Assistance Program
- University Center Program

While each of these programs may be of interest to Corridor communities, we focus here on those that are most directly relevant to the Corridor's economic development objectives. Following is a brief summary of select programs:

- Public Works and Economic Development Program: Works with distressed communities to revitalize, expand, and upgrade their physical infrastructure. Whenever possible, this program seeks to redevelop existing facilities and industrial/commercial locations. Examples of past infrastructure investments include water and sewer facilities, industrial access roads, rail spurs, port improvements, skill-training facilities, technology-related infrastructure, as well as the demolition, renovation, and construction of publicly-owned facilities. The average grant in FY99 was $829,000.

- Economic Adjustment Program: Assists state and local interests design and implement strategies to adjust or bring about change to an economy. The program focuses on areas that have experienced or are under threat of serious structural damage to the underlying economic base. The average grant in FY99 was $175,000 for non-defense adjustment programs.

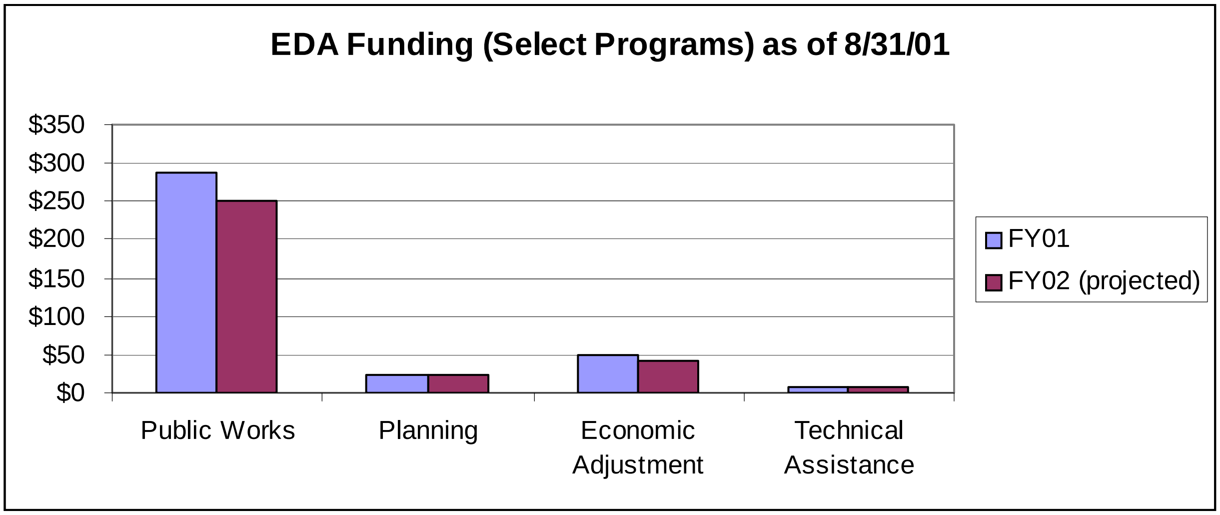
- Partnership Planning Grants: Partnership planning grants are awarded to establish and implement effective economic development programs at local and regional levels. Eligible activities under this program include the preparation and maintenance of a Comprehensive Economic Development Strategy (CEDS) process; implementation of the elements of the strategy; and the provision of planning and technical assistance services to communities and local governments within the organization's jurisdiction. Grants are normally awarded on an annual basis and priority consideration is given to currently funded grantees. The average grant in FY 99 was $54,000.

- Short Term Planning Grants: Supports economic analysis, definition of economic development goals, determination of project opportunities, and the formulation and implementation of programs to generate employment opportunities and increase incomes. Eligible activities include the preparation and maintenance of a continuous comprehensive economic development planning process, coordination of multi-jurisdictional planning efforts, development of institutional capacity, diversification of the local economic base and implementation of programs, projects and procedures designed to create and retain permanent jobs and increase incomes. EDA assistance is limited to 12 months and may be extended up to 36 months. The average grant in FY 99 was $61,000.

- Technical Assistance Program: Helps fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in distressed areas from making optimal decisions on local economic development issues. Grants under this program often support feasibility studies on potential economic development projects, such as industrial parks or business incubators, that communities are considering. Some communities and regional organizations have used grants to develop revitalization plans, to prepare tourism development strategies, to sponsor economic development conferences or seminars, and to establish geographic information systems for local planning and development purposes. The average grant in FY99 was $28,000.

- University Center Program: Helps institutions of higher education establish and operate outreach programs to provide technical assistance on economic development projects and programs. University Centers generally work with units of local government and nonprofit organizations. Projects may include preliminary feasibility studies, analysis of socio-economic data, specialized workshops, technology transfer, or other support for small and medium sized firms. University Centers are evaluated at least once every three years with peer review participation. Priority consideration for funding is given to institutions already participating in the program that demonstrate satisfactory performance. The average grant in FY 99 was $92,000.

- The chart below summarizes funding levels for key program areas, many of which are expected to decline from last year's levels. However, significant funding will still be available for eligible locations.



Source: International Economic Development Council

- Use of EDA programs along the Corridor is mixed:
- In 1999, the last year for which data is available, Corridor communities in Colorado and Oklahoma received negligible amounts of EDA funding. We were able to identify only one $20,000 project in Eads, Colorado.
- Corridor communities in Texas, by contrast, obtained $5.3 million by our calculations. Three projects accounted for 75% of the total: a railroad bridge in Laredo, a training center at Angelo State University, and a computing center at Texas Tech.
- Otherwise, communities generally received relatively small ($51,000) planning grants. Carrizo Springs also received $800,000 for detention center improvements. Interestingly, except for Carrizo Springs, most of the grants went to the larger communities in the corridor: Amarillo, Lubbock, San Angelo, and Laredo. This suggests plenty of additional opportunity for other communities to access needed financing through the EDA.

BUSINESS DEVELOPMENT OPPORTUNITIES

The purpose of this section is to analyze expected trade traffic within the Corridor and address possible industries and services that can develop as a result of Corridor completion. We have divided this task into two sections: trade-oriented opportunities and transit-oriented opportunities.

While we are focused here on the benefits of Corridor completion, it is important to remember that transportation is only one aspect of economic development. Further, transportation is only one of the factors driving corporate location decisions, generally ranking third or fourth in importance. In short, transportation infrastructure is a necessary but not sufficient condition for business attraction and economic growth.

In communities where transportation is a significant weakness, highway improvements will help support business development. However, to leverage this investment fully, communities need to continue to address the variety of issues, such as work force, education, quality of life, business climate, and other factors, that affect business growth and economic development.

TRADE-ORIENTED OPPORTUNITIES

Overview of Trade along the Corridor

Commonwealth was asked to analyze expected trade traffic within the Corridor Unfortunately, there are no resources that provide detailed trade data for Corridor jurisdictions. In the absence of data that would tell us what is exported and imported from the communities along the Corridor or what products are traveling on Corridor roads, we have pieced together several other sets of information to develop a general picture of Corridor trade traffic. These data sources include:

- US Commodity Flow Survey
- Bureau of Transportation Statistics trade data by National Transportation Analysis Region (NTAR)
- Texas A&M International University, Texas Centers for Border Economic and Enterprise Development
- Northwest Texas International Trade Center

Commodity Flow Survey

The Commodity Flow Survey (CFS) conducted by the US Census Bureau provides data on shipments originating from selected types of business establishments in the US. It provides national, state, and select metropolitan area data. However, separate data is not available for any of the Corridor communities. In its absence we compared CFS data for all of Texas and data for "rest of Texas" (which excludes data for Dallas/Fort Worth, Houston, San Antonio, and Austin). While this is not ideal, it does provide a picture of truck shipments in rural Texas.

- The "rest of Texas" appears more truck dependent for shipments than Texas as a whole. 72% of shipments by value were shipped via truck in "rest of Texas," compared to 65% in all of Texas. If measured by weight, rather than value, approximately 50% of shipments were sent via truck for both Texas and "rest of Texas." Higher value products, which are less dependent on trucks, tend to be shipped from metro areas.
- Overall, "rest of Texas" accounts for about one-third of total Texas shipments by all modes of transportation by value. However, it accounts for:
    - 65% of the value of agricultural shipments
    - 45% of grains, alcohol and tobacco products
    - 65% of stone, metallic ores, and nonmetallic minerals, and
    - 50% of wood products, leather and textiles.

- These categories are truck-dependent: 85-90% of shipments in these categories are shipped via truck.

Bureau of Transportation Statistics -- National Transportation Analysis Region

We also examined trade data by National Transportation Analysis Region (NTAR) to try to obtain data specific to the Ports-to-Plains Corridor. NTARs are different from other statistical categories or political jurisdictions. They were developed to address two problems in trade data collection: states are big and contain multiple centers of economic activity, and centers of economic activities often cross state lines. NTARs are considered useful for capturing the "functional geography" of freight transportation.

We first identified the NTARs that include the Ports-to-Plains communities we examine in this report. The NTARs also cover several other communities. We then examined: 1) exports and 2) exports via truck from these NTARs through the three border locations that are part of the Ports to Plains Corridor: Del Rio, Eagle Pass, and Laredo. Our goal was to identify the trade flows from Ports-to-Plains through the border communities to draw some conclusions about likely spin-offs from trade traffic.

CORRIDOR NTARS

NTAR	CITY	COUNTY
157 (Denver-Grand Junction-Cheyenne, WY-Scottsbluf, NE)	Denver, CO Limon, CO Lamar, CO	Denver Lincoln Prowers
137 (Oklahoma City – Lawton, OK – Amarillo)	Boise City, OK Stratford, TX Dumas, TX Amarillo, TX Canyon, TX Tulia, TX	Cimarron Sherman Moore Potter Randall Swisher
133 (El Paso-Lubbock-Odessa)	Plainview, TX Lubbock, TX O'Donnell, TX Lamesa, TX Big Spring, TX Midland, TX	Hale Lubbock Lynn Dawson Howard Midland
123 (Austin-Waco-San Angelo)	San Angelo, TX Sonora, TX	Tom Green Sutton
129 (San Antonio)	Del Rio, TX Eagle Pass, TX Laredo, TX	Val Verde Maverick Webb

Source: US Department of Transportation, Bureau of Transportation Statistics

NTAR EXPORTS TO SELECT BORDER CROSSINGS: ALL MODES OF TRANSPORTATION, 2000

		Del Rio	Eagle Pass	Laredo	Total	% of total
123	Austin-Waco-San Angelo	$7,589,350	$1,863,034	$76,633,913	$86,086,297	2%
129	San Antonio	$789,100,093	$264,309,863	$2,573,238,999	$3,626,648,955	82%
133	El Paso-Lubbock-Odessa	$40,186,6	$109,529,	$162,617,5	$312,334,0	7%

		11	839	94	44	
137	Oklahoma City-Lawton-Amarillo	$4,549,035	$2,102,053	$107,261,072	$113,912,160	3%
157	Denver-Grand Junction-Cheyenne-Scottsbluf, NE	$ 643,589	$51,247,736	$229,059,107	$280,950,432	6%
	Total	$842,068,678	$429,052,525	$3,148,810,685	$4,419,931,888	100%
	% of total	19%	10%	71%	100%	

Source: US Department of Transportation, Bureau of Transportation Statistics

- The San Antonio NTAR (which includes Del Rio, Eagle Pass and Laredo) accounts for 82% of the total Corridor NTAR exports through these crossings. The Austin-Waco-San Angelo NTAR accounts for the least (2%).
- 71% of total exports from Corridor NTARs pass through Laredo, compared to 19% in Del Rio, and 10% in Eagle Pass.
- While all NTARs send most of their exports through Laredo, they spread their total exports among these three crossings in different proportions:
- The Oklahoma City-Amarillo NTAR is the most dependent on the Laredo crossing, with 94% of its exports using this crossing.
- The El Paso-Lubbock-Odessa NTAR is the heaviest user of the Eagle Pass crossing, with 35% of its exports crossing here.
- San Antonio sends a greater percentage of its exports – 22% – through Del Rio than any of the other NTARs.
- The same patterns hold when we examine truck traffic specifically. The San Antonio NTAR accounts for 83% of total truck traffic through these three crossings. 71% of Corridor NTAR exports via truck go through Laredo.

VALUE OF EXPORTS VIA TRUCK AS A PERCENT OF ALL MODES - 2000

	DEL RIO	EAGLE PASS	LAREDO
Austin-Waco-San Angelo	100%	25%	91%
San Antonio	100%	87%	92%
El Paso-Lubbock-Odessa	100%	93%	82%

Oklahoma City-Lawton-Amarillo	100%	100%	95%
Denver-Grand Junction-Cheyenne-Scottsbluf, NE	100%	34%	97%

Source: Calculated from Bureau of Transportation Statistics data

- However, the importance of truck traffic to the border communities varies. Eagle Pass and Laredo both have rail crossings into Mexico; therefore trucks account for a smaller percent of their total traffic.

- Truck exports account for 100% of Del Rio's exports from Corridor NTARs.

- In Laredo, the rate ranges from 82-97% of total exports from Corridor NTARs.

- In Eagle Pass, truck traffic varies from 25-100%, depending on the NTAR.

- Del Rio is by far the most dependent of the three crossings on exports from Corridor NTARs: 73% of its total exports in 2000 originated from Corridor NTARs, compared to 10% in Eagle Pass and 8% in Laredo.

- Put another way, while Del Rio accounts for 19% of the exports sent through these three ports by Corridor NTARs, those exports account for 73% of Del Rio's total exports.

- While Eagle Pass accounts for 10% of the exports sent through these three ports by Corridor NTARs, those exports account for 10% of Eagle Pass's exports.

- While Laredo accounts for 71% of the exports sent through these three ports by Corridor NTARs, those exports account for only 8% of Laredo's exports.

Texas Centers for Border Economic and Enterprise Development

While the above data provides useful information about truck shipments and the relationship between Corridor communities and the three border crossings, it does not provide much guidance on what is actually being shipped. We therefore supplement those resources with data from Texas A&M International University on top imports and exports through each of the three border crossings on the Ports-to-Plains route.

SUMMARY OF TOP 25 IMPORTS FROM MEXICO THROUGH SELECT TEXAS PORTS, 2000

SITC CATEGORY	DEL RIO	EAGLE PASS	LAREDO
Live Animals	$27,953,602		
Beverages			$438,285,715

		$199,605,376	
Hides, Skins, and Furskins			$268,741,231
Textile Yarn, Fabrics	$17,993,057		
Iron and Steel		$40,333,021	
Nonferrous Metals		$46,463,179	
Manufactures of Metals	$691,299	$294,968,801	
Power Generating Machinery and Equipment		$241,236,407	$1,681,183,959
Machinery Specialized for Particular Industries	$18,806,697		
General Industrial Machinery and Equipment	$193,573,486		
Office Machines			$3,467,321,229
Telecommunications Equipment			$1,010,004,203
Electrical Machinery and Appliances	$440,175,855	$199,259,405	$1,303,521,708
Road Vehicles	$66,495,293	$207,960,197	$16,738,979,944
Transport Equipment		$25,340,089	$294,689,590
Furniture	$242,114,772	$52,447,696	$359,026,915
Apparel and Clothing Accessories		$1,101,710,302	$1,607,335,391
Footwear	$46,950,696		
Special Transactions	$30,242,507	$44,982,388	$791,588,625
TOTAL	$1,084,997,264	$2,454,306,861	$27,960,678,510

Source: Texas A&M International University

SUMMARY OF TOP 25 EXPORTS TO MEXICO THROUGH SELECT TEXAS PORTS, 2000

	DEL RIO	EAGLE PASS	LAREDO
Live Animals	$17,211,591		
Meat and Meat Preparations			$288,312,254
Cereals and Cereal Preparations		$80,737,953	
Hides, Skins, and Furskins		$48,419,917	
Oil seeds and Oleaginous Fruits		$62,526,240	
Textile Fibers		$34,094,216	$329,265,430
Coal, Coke and Briquettes		$30,629,711	
Natural and Manufactured Gas	$134,323,968		
Plastics in Primary Forms			$239,355,825
Plastics in Nonprimary Forms	$18,300,665		
Rubber Manufactures		$33,481,663	$469,799,097
Paper, Paperboard	$12,761,680		
Textile Yarn, Fabrics	$136,976,145	$82,172,534	
Manufactures of Metals	$47,317,143	$84,337,200	
Power Generating Machinery and Equipment		$394,914,625	$1,439,572,187
General Industrial Machinery and Equipment	$107,753,167	$31,368,287	
Office Machines			$ 944,433,392
Telecommunications Equipment		$30,980,001	$708,701,928
Electrical Machinery and Appliances	$258,757,685		$840,419,417
Road Vehicles	$38,369,860	$973,310,322	$7,586,362,757
Transport Equipment		$93,845,203	
Furniture	$110,954,478		$413,833,614
Apparel and Clothing Accessories		$486,691,859	
Footwear	$32,948,556		
Professional, Scientific and Controlling		$34,061,495	

Instruments			
Photographic Equipment and Supplies			$298,594,642
Misc. Manufactured Articles	$65,125,052		$626,843,197
Low -Value Shipments		$72,445,804	$433,167,107
TOTAL	$980,799,990	$2,574,017,030	$14,618,660,847

Source: Texas A&M International University

- As we saw above, nearly 75% of exports through Del Rio are from Corridor NTARs. If we assume, then, that these exports are more representative of Corridor exports than those sent through other ports, key sectors most likely to benefit from improved highway access to Mexico are:
- electrical machinery and appliances
- textile yarn and fabrics
- natural and manufactured gas, and
- industrial machinery
- Eagle Pass and Laredo have different export profiles.
- Power generating machinery and motor vehicles are very strong export categories for both.
- Apparel exports are very important for Eagle Pass.
- While we know that Corridor NTARs use these ports, it is impossible to determine which portion of these and other export categories match the Corridor because Corridor NTARs only account for 8-10% of the total exports through these two crossings. These industries may or may not have a strong base along the corridor, but they may suggest longer-term business development opportunities, if their operating requirements match Corridor community characteristics.

Northwest Texas ITC

NWT-ITC is the only international trade development agency we were able to identify among the Corridor communities. While confirming that community specific data on the nature of imports and exports in the region is not available, NWT-ITC also provided information about the companies with which it works. NWT-ITC alone works with companies that have over $200 million in annual exports (worldwide). The total figure for the region could easily exceed three times that amount. Exports, then, are important to local businesses and the local economy.

Specific statistics on the industry or commodity categories that comprise total exports is not available. However, major product categories based on NWT-ITC experience would include:

- oil and gas equipment
- agricultural machinery and equipment, and
- other manufacturing and services, especially environmental services related to agriculture and oil and gas

Agricultural commodities are not included in these estimates.

This breakdown is largely consistent with the set of export categories identified above as likely to benefit from increased trade traffic along Ports-to-Plains.

Implications

Sufficient information is not available to make direct and specific estimates of the spin-off industries related to trade traffic along the Ports-to-Plains corridor. However, based on the data sources cited above, we suggest that the following types of industries are most likely to benefit:

- Agricultural machinery and equipment and related products
- Oil and gas machinery and equipment and related products
- Electrical machinery and appliances
- Leather and textiles
- Agricultural shipments

TRANSIT-ORIENTED OPPORTUNITIES

While we might expect the effects of highway investments on economic development to be well-defined, they are not. There are several reasons this is the case. From an economic perspective, accurately measuring the impact of highway investment is difficult because of the problem of isolating highway effects from the larger processes associated with regional economic growth.[6] Deciding what to measure (jobs, output, population growth, etc.), when to measure it (one year, ten years, etc), and where to measure it (intersection, town, region, state, etc) are also ongoing problems associated with determining the specific economic development effects of transportation investments.

In addition, from a transportation planning perspective, economic development effects have been secondary to the travel efficiency effects. According to one source from the Federal Highway Administration, it was not until 1998 that the words "economic growth and development" were included in a transportation authorization bill.[7] Moving traffic faster has been more important in most transportation studies than, say, changes in employment patterns.

While benefit-cost analyses have been performed, they are not the same as economic development studies. We can see this in many transportation feasibility studies that attempt to address economic development impacts. While they provide invaluable information on transportation projects, they provide very little guidance for community leaders on the business development opportunities that can arise from transportation projects.

Below we examine both economic development studies on transportation effects and transportation studies on economic development effects.

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[6] "Highway Investment and Rural Economic Development : An Annotated Bibliography," Dennis M. Brown, Food and Rural Economics Division, Economic Research Services, USDA. Bibliographies and Literature of Agriculture No. 133. April 1999.

[7] "A Brief History of Economic Development and Highways Document," Martin Weiss, FHWA for TRB Conference on Transportation and Economic Development, 9/01.

Economic Development Studies of Transportation

There is an extensive body of literature on the role that transportation infrastructure plays in economic development. For the most part, studies have found that transportation has a positive effect on economic development, and specifically that public provision of transportation infrastructure has been effective in stimulating economic development.

However, there are several outstanding issues regarding the exact relationship between the local transport network and regional economic performance. First, the causality is not clear and seems to vary by situation. Second, the effects seem to vary by "scale," and the effects of local projects vary a great deal. Third, definitions and measurements of both the "transport network" and "regional economic performance" vary among studies.

There is hardly any guidance in these studies on the specific types of industries that are likely to benefit from increased transportation infrastructure, providing little help for locations trying to determine the business development effects or how to support them in their communities.

Within the broad category of transportation and economic development, there have been many focused studies specifically on highway investments and rural development. These also face the same set of problems discussed above. However, a US Department of Agriculture review[8] has suggested that some broad conclusions can be drawn, although with several caveats regarding local implications:

- In general, highway investments can be expected to generate economic development, but it is often not the most important factor in that development.
- Highway expenditures have been found to help increase rural employment, particularly in manufacturing and retail industries.
- The benefits of the highway investment are not always equally spread among communities. Rural counties that are close to metro areas tend to benefit more in the short-term than isolated rural counties. However, long-term effects are not clear.

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[1] "Highway Investment and Rural Economic Development : An Annotated Bibliography," Dennis M. Brown, Food and Rural Economics Division, Economic Research Services, USDA. Bibliographies and Literature of Agriculture No. 133. April 1999.

Transportation Feasibility Estimates of Economic Development

Transportation feasibility studies take a very different approach to determining the economic effects of highway investments. From the Ports-to-Plains Feasibility Study,

> (Economic development) benefits are a measure of the region's economic ability to convert the inherent travel efficiency benefits into a competitive economic advantage. In other words, how effectively does the economy utilize construction expenditures, the fuel cost savings, the time savings and other benefits to create new jobs and increase economic output.[9]

Economic development impacts are therefore determined by travel efficiency measures and money spent on highway construction and maintenance. These impacts are most relevant to existing businesses. Using a well-respected and commonly-used model, the study then provides summary measures of estimates of economic development impact covering output, value added, personal income, wages, and income, and employment. However, as with many of the economic development studies, no detail is provided in the feasibility study about the type of employment to be generated, so we cannot use this study to determine the spin-off industries that can be expected from Corridor development.

Other studies of trade corridors using the same model provide a little more insight into the type of employment likely to be generated. Given the nature of the model, it is reasonable to examine the proportion of job creation in different sectors along other corridors and consider the implications for Ports-to-Plains. One major study concludes that the travel efficiency benefits will have the most impact on the trucking industry. It does not highlight any other industry. This study also quantifies the impact of a variety of corridor initiatives, not just highway construction, on employment by broad sector categories. It concludes that the greatest growth rate will occur in the transportation sector, while the greatest number of new jobs will be created in the services sector.

Implications

From economic development studies, the benefits appear greatest in manufacturing and retail. From the feasibility studies, the benefits appear greatest in transportation and services. Given the paucity of direct guidance from existing studies on the spin-off industries within these broad sectors that can be expected from highway investments, we can again only provide some general conclusions about business development effects.

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[9] "Ports to Plains Feasibility Study," Wilbur Smith Associates, 2001, p. 8-1.

Manufacturing

Transportation-intensive manufacturing companies are most likely to gain from the travel efficiency benefits described in the feasibility study. As highway improvements cut travel time and provide more direct access to the border, existing manufacturing companies that export to Mexico and rely on truck transportation will benefit.

As suggested in the first part of this section, these industries are likely to include oil and gas equipment, agricultural equipment and machinery, electrical machinery and appliances, and leather and textiles.

Retail

There are several categories of retail businesses that are likely to benefit from improved transportation along the Ports-to-Plains corridor. For many communities, the main benefit will be greater traffic, not necessarily truck traffic, that will increase business for a variety of local shops. Many also expressed interest in restaurants, gas stations, and truck stops that may be more directly linked to truck traffic along the Corridor itself.

Transportation

The transportation sector is also diverse, including various modes of transportation, warehousing and distribution, logistics, and various transportation support services. Because the sector is so diverse, it is likely that all communities along the corridor have the potential to benefit from at least one industry in this category. Examples might be increased trucking in smaller community, a warehouse operation in a community with several transportation assets, or professional logistics and support in a community with the appropriate workforce and telecommunications infrastructure.

Services

The services sector covers a wide range of administrative, professional and personal service categories. Again, the type of services employment likely to expand in a community depends more on the assets of that community than the development of the Corridor itself. In general, high-paying, professional services are more likely to locate in metropolitan areas to take advantage of customer access, the work force, and availability, of office space and telecommunications services.

Agriculture

While not addressed as a separate sector in the above analyses, improved transportation will also benefit agricultural transport in many communities through the same efficiency gains seen for manufacturing and trucking. Improved speed to market should create benefits for both livestock and crop operations.

CONCLUSIONS AND ACTION ITEMS

This report examined a broad range of factors affecting economic development opportunities along the Ports-to-Plains Corridor. As requested, we conclude with a set of specific action items for the Coalition pursue to advance the Ports-to-Plains mission.

- Organize economic development strategies by segments along the Corridor, focusing first on the rural and mid-size communities that both want and need assistance and for whom Ports-to-Plains is a priority project.

- Establish a focused set of Corridor-wide priority highway projects to pursue with Congress for near-term appropriations. This study preliminarily identifies a set of such projects reported to us by Corridor communities. Pursue these projects as a unified corridor striving to obtain clear economic development objectives – not as individual communities striving to obtain more money.

- Define a Corridor strategy to position the region for TEA-21 reauthorization, following the same guidelines as for near-term appropriations. Unified community support and a clear rationale will be necessary to focus attention on Corridor needs.

- If the Corridor chooses to pursue Intelligent Transportation Systems projects, focus first on safety issues under the Emergency Medical Services (EMS) development track in the Rural ITS program and developing the concept of an inland customs facility. Whether seeking earmarks or grant funding, act as a unified Corridor, establish proof of need, and identify regional partners with ITS experience.

- Pursue with congressional representatives and USDA officials the concept of establishing a REAP Zone in parts or all of the Corridor. With initial feedback, the Corridor coalition can then decide whether to pursue it further, and if so, whether to take the lead on developing the concept to serve Corridor communities in whole or in part.

- If economic development is a priority, create a Corridor-wide strategic plan for economic development. This report is the first step in gathering relevant data and establishing a common framework for examining economic development issues. A full strategic plan to which a broad range of stakeholders from Corridor communities commit is still necessary to define and ultimately achieve economic development goals. This plan should also incorporate non-transportation issues that are also critical to economic development.

- Preliminary target markets cover a broad range of opportunities to match the varied location and character of the towns and cities along the Ports-to-Plains Corridor. There are potential benefits in most sectors, including manufacturing, transportation and warehousing, retail, services, and agriculture.