A Deliberate Approach

It is now apparent that southern Doña Ana County (the Border Area) has arrived at a point of departure. Major investment by Union Pacific (UP) in Santa Teresa, aligned with recent surges in Maquila investment and broader supply chain shifts across North America point to the need for a more proactive strategy that prepares the Border Area and Paso del Norte for a better economic future, one that enhances quality of life for its residents. These goals sit at the heart of the broader Viva Doña Ana effort, in which this Border Area Economic Development Strategy (BAEDS) is positioned.

The Paso del Norte (the Region), encompassing El Paso County, Doña Ana County, and Ciudad Juárez is today situated at a key junction of North American commerce, supporting more than 800,000 jobs and some $70 billion in annual international trade. While the Paso del Norte has benefited greatly since the 1960’s with introduction of the Maquila in Mexico and through the North American Free Trade Agreement (NAFTA) in the 1990’s, El Paso and Doña Ana Counties have not benefited equally, with poverty and unemployment exceeding U.S. national averages, and an economic base that remains highly dependent on Federal Government spending.

Further, while El Paso and Doña Ana Counties have been slow to recover from the Great Recession, Ciudad Juárez has experienced dramatic growth in manufacturing-linked foreign direct investment (more than $2 billion) and astonishing growth in employment (70,000 new jobs) since 2010. The Mexican state of Chihuahua has witnessed an equally dramatic wave of manufacturing-linked foreign investment, which has now ignited debate about infrastructure investments that will facilitate movement of Maquila goods to their North American destination markets.

Recent dramatic growth in Ciudad Juarez and across Chihuahua has triggered interest in industrial development in Santa Teresa and San Jerónimo, as well as residential and commercial projects. With recent UP investments that link with broader changes in North American supply chains, the elements of location and timing are fully in place to support accelerated growth and investment in the Border Area, but only if proactive policy decisions and infrastructure investments are made.

It is the intent of the BAEDS to provide recommendations that will enhance the economic and community resiliency of the Border Area as well as the Paso del Norte, positioning them both to respond positively as growth opportunities unfold.
Employment growth across Juárez has increased since 2010, at an absolute rate faster than Doña Ana or El Paso Counties.

Reflecting increased economic activity, exports from the EL Paso MSA have grown significantly since 2009, along with increases in truck traffic.
Linked Freight Movement and Economic Development Outcomes

While the UP Santa Teresa intermodal yard is a strategic Border Area opportunity, its opening raises equally significant questions that, if not addressed, could impede economic development potential and impact quality of life for the Border Area and Region. First, the new yard will provide enhanced operational flexibility for UP along their entire Sunset Corridor to better manage surging freight volumes. Intermodal yards like Santa Teresa are part of a broader Class 1 Railroad strategy to capture a larger share of freight that currently moves by truck. Second, the new yard will benefit from ongoing Maquila investments, providing enhanced connectivity between production centers in Chihuahua with U.S destination markets. For Doña Ana County and the Border Area, implications of the new yard are clear:

Recently-built intermodal yards have attracted significant, directly adjacent distribution and logistics activity. Companies seek out these locations to lower their drayage, distribution, and transportation costs;

While supply chains will not react immediately to the new UP intermodal service, Maquila operations across Ciudad Juarez and Chihuahua will re-evaluate transportation costs associated with their US markets in the coming months; for freight moves beyond 900 miles, UP intermodal service will be competitive;

The UP yard is positioned geographically to see dramatic growth in the number of container "lifts", growing from a current capacity of 250,000 lifts / year up to a design capacity of 700,000 annual lifts, according to UP. It is not certain that Border Area roads are ready for growth in truck traffic, many of which are county-owned or maintained, and will eventually require repair and replacement as overweight truck volumes increase.

Additional development is to be expected in Santa Teresa.

Shifting supply chains and increasing freight volumes have implications for the entire Paso del Norte.

Doña Ana County faces a decision.
Call to Action

These realities are one reason why Doña Ana County needs to make deliberate decisions regarding infrastructure and organizational capacity in the Border Area. Short-term questions focus specifically on whether the County’s role in the Border Area should expand or be delegated to a special purpose, multi-jurisdictional entity.

For the Paso del Norte Region, anticipated growth must serve as a catalyst for better integration of transportation planning with land use planning and economic development. It also requires the Region to face broader issues that require focused and collaborative responses.

The worst case for Doña Ana and El Paso Counties would be dramatic growth in truck volumes combined with an inability or unwillingness to fund infrastructure that will allow for proper connections across the border between Texas and New Mexico. While the Region has found ways to manage these challenges in the past, it is now clear that recent private investments will be significant for the Border area. Active steps are needed to prepare for a future that should be defined by growth and opportunity, but only if specific investments in infrastructure and organizational capacity are made.

Regional Issues

These five issues should be a focus of Regional action.

1. The reality of unbalanced economic growth across El Paso and Dona Ana Counties offset by dramatic growth across the border in Mexico.

2. The US General Services Agency’s limited resources to sustain funding for Port of Entry improvements, meaning that local resources will be needed.

3. That existing Border Area economic development organizations lack the resources and focused organizational depth to fully unlock the economic development opportunity that otherwise appears to be in place in the Border Area; additional resources, capacity, and coordination are needed.

4. Water availability and quality remains a focus of considerable debate and concern. The State of New Mexico is currently undertaking a state-wide study to confirm water availability. Outcomes are expected in 2015.

5. The workforce needed to support economic growth is distributed across the bi-state, bi-national region, raising questions about impacts to commuting, transportation costs for working households with limited transportation options, and the adequacy of the planned supply of workforce housing units close to job opportunities.
Role of Doña Ana County

Doña Ana County Government needs to define its role in the Border Area as a partner, rather than as the sole authority or leader of last resort. It is already clear that:

- Doña Ana County owns or maintains a significant percentage of roads in the Border Area. Many of these roads are older, and will need to be replaced or upgraded, particularly as the percentage of overweight trucks grows.
- Doña Ana County currently provides public safety services in unincorporated areas proximate to the border.
- Doña Ana County faces a number of financial constraints which limit its ability to quickly absorb additional infrastructure costs.
- While the Camino Real Regional Utility Authority (CRRUA) manages water and wastewater infrastructure and serves as the planning and zoning authority for the Border Area, they rely on Doña Ana County to provide staffing capacity for planning.
- There is a pressing need for enhanced coordination across borders with Mexico and Texas, to ensure that investments made in the Border Area connect and are coordinated into the larger Paso del Norte; Doña Ana County needs to play a significant role in these conversations.

Organizational Capacity

The BAEDS confirms that additional local organizational capacity and financial resources are needed. AECOM experience highlights several alternative operating structures for the Border Area in response:

- A Border Development Authority
- A Freight District or Port Authority
- A Joint Powers Authority
- Border Zone Development Corporation
- Business Improvement District/Community Development Corporation
- Expanded local municipal capacity

Each structure varies in terms of governance, the ability to issue debt and enter into contracts, acquire land, and own assets. The added consideration for the Border Area is the impact of freight, and the corresponding need to have a broader regional view of freight network connections and land use impacts. This argument builds from Federal Highway Administration guidance regarding challenges associated with how freight currently interacts with land use, including:

- Land use policies are not coordinated across jurisdictions, which can lead to encroachment by non-compatible land uses
• Growing freight volumes and congestion create conflicts, particularly in residential areas, if not planned and coordinated;

• The challenge that “freight doesn’t vote” argues for a more cohesive strategy for regional engagement with movers of freight and the local jurisdictions they impact;

• Economic development and transportation planning are often disconnected;

• Connection between freight, land use, sustainability and public health is increasingly important, for “last mile” deliveries to end users as well as for “thru traffic”, which is only passing through the area en route to its final destination. The impacts of diesel emissions and congestion are concerns, particularly for at-risk populations.

• There is growing awareness that high velocity intermodal yards generate unique truck traffic impacts, which need specific monitoring.

In response to these challenges, regional authorities and special districts have been established to better manage and benefit from freight movement. State to state examples range from the Port Authority of New York New Jersey to the Kansas City Transportation District and the Illinois–Missouri–Iowa Mid America Port District. Newer developments include the Northwest Infrastructure Exchange involving the states of California, Oregon and Washington, as well as the province of British Columbia. The Port Metro Vancouver – Vancouver Fraser Port Authority and the Louisville and Southern Indiana Bridges Authority are additional examples of multisite, multi-state special transportation districts.
Work Toward a Regional Economic Development Structure

The Paso del Norte is affected by a unique degree of political fragmentation, linked with jurisdictional boundaries and organizations (effectively silos) in two countries, three states, and three counties, which constrains the economic performance of a region with 2.4 million residents. Fragmentation is most evident in economic development, with the Border Industrial Association, the Mesilla Valley Economic Development Alliance, the New Mexico Border Authority, the Borderplex Alliance, City of El Paso Development Department, and Economic Development of Ciudad Juarez all actively trying to “sell” a region the size of Metropolitan Denver. In addition, Doña Ana County and El Paso County are each associated with state-centric workforce investment boards, which have different boundaries than the region’s economic development entities. The impact of these organizational impediments on economic development cannot be understated. The region needs to work toward a more integrated organizational model for economic development.

Recommendations: Short-Term Strategies

Beyond what has already been discussed, the following specific recommendations have been identified. Further information regarding these ideas is contained with the Border Area Economic Development Strategy report:

- Doña Ana County needs to identify a point person to manage border area affairs.
- Doña Ana County needs to implement an asset management program for roadways that it owns and/or maintains. The effort may need to incorporate life cycle costs as well as current pavement conditions and traffic volumes.
- Doña Ana County needs to play an active role in the future of the Sunland Park POE, including consideration of an active partnership with the Town of Sunland Park.
- Doña Ana & El Paso Counties, the New Mexico and Texas DOT’s and the El Paso MPO need to establish annual monitoring regimes for truck counts on key arterials across the Border Area, as well as the number of annual lifts at UP Santa Teresa. There is also a broader need to re-evaluate existing truck routes and identify improvements, including turning lanes, signal timing, etc. This point is essential, given
anticipated residential growth in the Border Area.

• The El Paso MPO, with support from NMDOT, TXDOT, and Doña Ana County should initiate a regional freight movement study to document recent shifts in what commodities and manufactured goods are moving, and where they are going. Outputs will frame support and priorities for candidate infrastructure projects, noted below. The study will need to evaluate truck impacts, as well as how industrial development patterns on both sides of the border align with transportation infrastructure.

• Detailed field surveys of existing housing stock need to be undertaken to identify housing inventories and levels of affordability. Current plans for a Doña Ana County–led Affordable Housing Plan align with this goal, in cooperation with the Mesilla Valley Public Housing Authority; the study is expected to be completed by June of 2015. Resulting information (housing unit size, condition, amenities, and valuation) should be incorporated in a regional GIS framework.

• The Region needs to undertake a detailed economic analysis of the Paso del Norte using input–output data, to clarify how linkages between industry sectors across Doña Ana County, El Paso County, and Ciudad Juárez have changed over the past 10 years, and how they may change with investments associated with the Santa Teresa POE, UP investments. While local companies have learned how to work within constraints created by local borders, resulting sector linkages across borders are not readily apparent in a political context, and need to be better defined.

• Border Area economic development organizations need to ensure that companies in Doña Ana County are benefiting from July 2014 approval of the Alternative Site Framework for Foreign Trade Zone 197.

• NMDOT is currently undertaking a border master plan to collect data, identify planning issues on both sides of the border, and engage with stakeholders to build consensus around priorities. Outcomes from this study will influence mid-term priorities.
Recommendations: Mid-Term Strategies

- One Initiative of Viva Doña Ana is to create a GIS web portal through a partnership with New Mexico State University (NMSU). Once implemented, this program should aspire to be regional in scope, moving beyond the existing GIS clearing house associated with the Paso del Norte. More robust traffic data should be incorporated, along with expanded land use and property record information.

- As local economic recovery strengthens, conversations regarding public transit will need to continue. Partnerships with the private sector (including IDI / Gazely) will be required to sustain support of future bus connections in the Border Area. As well connectivity with existing regional transit systems will need to be confirmed through conversations with SunMetro, including the new El Paso Bus Rapid Transit Mesa Corridor line.

- The Border Area is served by two Council of Government (COG) organizations, both of which have authored comprehensive economic development strategies (CEDS). As such, the Border Area should be eligible for US Economic Development Administration (EDA) infrastructure grant funding. Further investigation of EDA opportunities by local economic development representatives is imperative.

Recommendations: Planning

Planning recommendations for the Border Area build from three central tenants. First, the UP Santa Teresa yard is now open and residential development is beginning to accelerate, even as existing local roads do not appear adequate. Second, the Border Area is a unique place because of the existing covenants, conditions, and restrictions (CC&R’s) that are in place for private industrial development. Third, outcomes from Viva Dona Ana will include a new county-wide comprehensive plan and unified development code (UDC). Recommendations presume a continued joint effort between CRRUA and Doña Ana County Planning to evaluate the impact of the new county-wide...
comprehensive plan and unified development code on the Border Area. One goal will be to confirm if existing CC&R’s are consistent with new UDC guidelines. Given the amount of time that has passed since the original Verde Master Plan was announced, the two organizations should re-examine the plan and amendments to ensure that the Border Area can support a sustainable balance of residential and industrial uses in relation to transportation system improvements that can sustain growth.

The Border Area also contends with unique freight impacts, and that county-wide standards may not be appropriate. Considerations include:

- As freight rail corridors are valuable, best practices include minimum setbacks to prevent encroachment, and to mitigate vibration and noise associated with freight trains.
- Identification of specific at-grade railroad crossings that eventually need to be grade-separated.
- Protect industrial areas from encroaching commercial and residential uses, while ensuring that industrial areas have access to supporting services.
- Link industrial building types to their anticipated trucking requirements.
- Consider introducing workforce housing in locations proximate to employers but not in conflict with trucking corridors.

**Potential Priority Infrastructure Projects**

Enhanced freight monitoring efforts and data analysis will allow regional officials to make informed decisions regarding infrastructure projects that will enhance how traffic flows through the Region. For example, county officials have already identified the need for a crosswind runway at Doña Ana International Jetport as well as reconstruction of 1.3 miles of Airport Road from Pete V. Domenici Hwy. as part of current capital improvement plans. Other proposed projects could include:

- NMDOT, TXDOT and the El Paso MPO need to re-evaluate Pete V. Domenici Hwy. & and Artcraft Rd., working toward a grade-separated limited-access route between the Santa Teresa POE and I-10. Dedicated truck lanes or a toll road should be considered.
- The UP Santa Teresa yard has increased truck movements along Airport Road from Pete V. Domenici Hwy. to McNutt, and eventually to I–10. Of concern is the location of Santa Teresa High School along Airport Rd., a two-lane facility at present. Presuming that Airport Rd. continues to be an option for trucks making connections eastward, widening of this road near the school needs to be studied.
- NMDOT, TXDOT and the El Paso MPO should study the need for a truck focused interstate way-finding system, which provides specific guidance to thru-trucks regarding congestion on local interstates.
- NMDOT, TXDOT and the El Paso MPO should evaluate improvement of Highway 9 connecting to McNutt for commercial traffic.
- NMDOT and the El Paso MPO needs to continue to evaluate the West Mesa Corridor connection from the border area northward to I–10 near Las Cruces, aligned with updated traffic and freight demand studies that factor in the new UP yard.
- NMDOT and the El Paso MPO need to evaluate corridors to connect the Santa Teresa Area with NM State Route 404, to support east and northeast bound truck movements.
• The New Mexico Border Authority is evaluating a rail connection between the Santa Teresa POE and existing UP and BNSF mainlines. Experience suggests that an entirely railroad-funded solution is unlikely on the US side, as Class 1 railroads remain hesitant about mismatches between benefits and costs, and are concerned about the introduction of additional traffic on already congested mainlines. For this reason, the Border Authority and / or NMDOT will need to consider financial and operational roles in the project. Nationally, DOT’s are partnering with railroads to enhance rail capacity.

• There is growing interest in compressed or liquid natural gas (CNG/LNG) as a truck fuel, linked with lower fuel costs and reduced emissions. Although diesel fuel in Mexico is less expensive, consideration should be given to a regional natural gas fueling strategy for municipal fleets and trucking companies, as a response to air quality concerns.

• With news reports indicating that BNSF will expand intermodal service between Mexico and Chicago, Officials from NMDOT, Doña Ana County and the City of Las Cruces should begin to plan for growth in traffic along the BNSF main line that runs parallel with NM 478 toward Las Cruces with eventual need for grade-separated routes.

• Infrastructure funding remains a topic of national debate. While Public Private Partnerships (3P) are popular, these structures are ultimately tied to revenue streams that can support investor interest and rate-of-return thresholds. At minimum, the Region should consider enabling legislation for “impact fees” on trucks that cross the border; resulting revenues could be allocated for Border Area improvements. Projects such as the Sunland Park POE should be pursued, in part because POE projects are tied to crossing fees.

Funding considerations include:

• Officials should evaluate the applicability and need for impact fees, assessments or special tax districts on all development and properties that utilize and benefit from the infrastructure, spreading the cost of infrastructure among more and higher value land uses, reducing the cost burden on industrial uses alone.

• Tax Increment Financing can be used to fund infrastructure improvements, to the extent that specific projects do not otherwise benefit from property tax abatement. Experience in other border areas also suggests that industrial values alone may not be sufficient to drive sufficient tax increment to pay for necessary improvements.

• Given the sustainability implications associated with rapid growth in freight volumes, El Paso and Doña Ana Counties would be an ideal candidate for future rounds of Tiger Grant funding.

• Future rounds of HUD funding appear to be shifting toward investments that enhance regional resiliency; future announcements by HUD will confirm the amount of grant funding that will be available.

• Experience in Detroit and Windsor, Ontario associated with the planned construction of the New International Trade Crossing provides a case study for the plausible role of the Mexican Government to fund improvements on the US side of the border that have obvious benefits to citizens in Juarez. The new bridge between Canada and the US is being funded largely by the Canadian government using a 3P structure, in response to traffic problems on the Canadian side of the border.
The San Diego/Tijuana border zone is a major border industrial area. The US side includes three border crossings, a general aviation airport, a planned cross-border airport terminal, and sensitive habitat. The San Diego region also lacks local water resources. Lessons from the Border Area include:

- Cumulative demand for industrial and distribution space over the past 40 years has been insufficient to absorb the thousands of acres of industrially zoned land adjacent to the border within the City of San Diego and San Diego County. More development has occurred south of the border.
- While local jurisdictions are primarily responsible for financing and developing infrastructure on the US side, dedicated industrial projects have found it difficult to raise sufficient funds for infrastructure through impact fees alone. As a result, planned residential and commercial development has been introduced to provide more housing opportunities, and to finance transportation infrastructure costs.
- Regional, state, and federal funding sources, and tolls, have been important for financing and building improvements to the major freeway, tollway, and customs inspections facilities to improve goods movement flow.
- The State of California has passed legislation allowing for creation of Border Zone Infrastructure Financing Districts, a form of tax increment financing district, that the City of San Diego has investigated for facilities financing, but has not yet utilized.
- Community Plans have been prepared and adopted to coordinate land uses within each jurisdiction (City of San Diego and unincorporated County of San Diego) to diversify land uses and avoid conflicts between residential, commercial, and industrial activities, plan for public facilities and infrastructure, and protect sensitive habitat and land forms.
- With multiple jurisdictions involved in the financing and development of infrastructure, and with land use authority resting with local agencies, there was a clear need for enhanced border area coordination; local mechanisms were established to coordinate land use, transportation, infrastructure, and environmental planning on both sides of the border.
- At a mega-regional level, the California border counties and Baja Norte region of 6.6 million people is jointly promoted to global investors as the CaliBaja economic region by economic development corporations on both sides of the border.