INTRODUCTION

This essay addresses the idea of transborder planning and cooperation by reviewing a sample of existing programs of cooperation along the Mexican-U.S. border, as well as more recent institutions created to address the region. The early portions of the report provide background for the idea of transborder cooperation by outlining the evolution of the idea.

Prior to the middle of the twentieth century, international boundaries were viewed as buffer zones between nation states, defended edges to be fortified with military infrastructure, but were carefully avoided as places of production, development, and settlement. Indeed, most of the great cities of the world remained purposefully lodged in their nations' interiors, far from the uncertainties of the international boundary. Since 1950, the scale of national defense has shifted away from land boundaries. Meanwhile, new technologies have led to the globalization of markets, communication, and transportation, and have profoundly changed the way nations organize their territory and understand the ecosystem. As the twentieth century comes to a close, the world, territorially speaking, is very different. International boundaries now pose enormous new opportunities for resource development, production, and urban growth. These opportunities also carry vast new responsibilities for managing ecosystems that transcend international boundaries.

One prototype of global urban space in the next century is what can be called the transfrontier metropolis. Since the dawn of the nation-state in the nineteenth century, cities have been understood as phys-
The late twentieth century marks a new global geography, where city-regions housing millions of inhabitants sprawl across international boundaries, most notably in Western Europe and North America. Important European, transfrontier, urban agglomerations with populations ranging between 300,000 and one million inhabitants include Basel-Mulhouse-Freiburg (Swiss-French-German border); Maastricht-Aachen-Liege (Dutch-German-Belgian border); the Geneva metropolitan area (Swiss-French border); and the Strasbourg metropolitan area (French-German border). In North America, one finds transfrontier urban regions housing between 250,000 and four million people along the Canadian-U.S. border at Vancouver-Victoria-Seattle, Detroit-Windsor, and Toronto-Hamilton-Buffalo; and on the Mexican-U.S. border at Tijuana-San Diego, Ciudad Juárez-El Paso, Mexicali-Calexico and El Centro, Nuevo Laredo-Laredo, Reynosa-McAllen, and Matamoros-Brownsville.

Transfrontier metropolitan regions typically consist of two or more settlement core areas located around an international boundary. Over time, these settlement centers have fused together to form a single ecological and functional city-region.

THE MEXICAN-U.S. TRANSFRONTIER METROPOLIS

Probably the most vivid example of transfrontier urban space is found along the border between Mexico and the United States. Today, more than 12 million people live in transfrontier metropolitan regions that blanket the 2,000-mile boundary from Matamoros-Brownsville to Tijuana-San Diego. Citizens on either side of the boundary are increasingly drawn together into a web of north-south relations, where the Third World vs. First World and developing vs. developed dichotomies are cast aside as urban neighbors become part of a common transnational living and working space. The largest Mexican-U.S. transfrontier urbanized regions include Tijuana-San Diego (estimated population, 4.5 million), Ciudad Juárez-El Paso (2.5 million), Mexicali-Imperial Valley (1.5 million), Reynosa-McAllen (0.8 million), Matamoros-Brownsville (0.7 million), and Nuevo Laredo-Laredo (0.5 million). These transfrontier urban regions exist in a state of ecological and functional overlap, manifest in the form of a set of overlapping activity systems and ecosystems that tie twin cities together. These systems can be outlined as follows:
TRANSFRONTIER ACTIVITY SYSTEMS

Activity systems are the daily functional systems that define the geography of the transborder urban economies.

Transfrontier Labor Markets

Nearly 300,000 workers legally travel across the border, from the Mexican to the U.S. side of a transfrontier metropolis, to work in the United States on a daily or weekly basis. Countless thousands of others cross illegally with a border resident card (that permits Mexican border residents to cross into the United States for nonwork purposes, but which is frequently used illegally to get to work). The creation of a class of legal international commuter workers within the transfrontier urban region can be traced to a 1963 Supreme Court decision (Texas State AFL-CIO v. Kennedy) in which the courts ruled that anyone in possession of an alien resident card (lawfully permitted permanent residence in the United States) could live outside the borders of the country as long as he or she continued to work within the United States. In effect, the Court recognized that Mexican border cities could serve as bedroom communities for legally immigrated Mexican workers in the United States.

Transfrontier Consumer Markets

More than six billion dollars in commercial transactions occur annually across the Mexican-U.S. border, while several hundred million border crossings take place each year, primarily between the partners that form the transnational metropolis. Clearly, this is the most densely populated and heavily used border region in the world. Consumers constitute the most active group of legal border crossers, and are perhaps the primary population that ties together the two sides of the Mexican-U.S. transfrontier metropolis. The North American Free Trade Agreement (NAFTA), with its emphasis on opening borders and increasing economic integration, will heighten the unification of settlements that defines transfrontier cities. Consumers constitute a complex web of flows north and south across the border. Their circulation patterns can be predicted based on comparative advantages of products on either side of the frontier: U.S. consumers travel south to purchase prescription drugs, bottled beverages, furniture, foods, arts and crafts, medical and dental services, car repairs, and entertainment; Mexican consumers travel north for manufactured goods.
clothing, electronic goods, refrigerators, washing machines, automobiles, auto parts, and so forth. 

Transfrontier Services

Since the 1920s, Mexican border cities have defined themselves partly as recreational places for U.S. border region residents and visitors. In the 1920s, prohibition of alcohol and gambling in the United States served as a powerful catalyst to the formation of a new Mexican industry border tourism. By the second half of the 1920s, tourism infrastructure became the defining feature of the architecture of Mexican border towns. So too, the landscape of Mexican border cities began to transform itself in ways that would attract more American consumers. This legacy has endured to the end of the twentieth century. Tourism continues to be a vital generator of revenue in the border region. For Mexico as a nation, tourism is the third largest source of national income, after oil and manufacturing.

Transfrontier Production/Global Factories

Much has been said and written about offshore manufacturing, where multinational corporations relocate their assembly work to cheap labor enclaves in places like Hong Kong, Singapore, South Korea, Taiwan, and Haiti. Since 1965, Mexico has been an important participant in this emerging trend toward the globalization of the factory. Most of the global factories in Mexico are located in the transfrontier cities. A cheap labor enclave on the Mexican side of the border (in Spanish, called a maquiladora) is linked to a headquarters and warehouse on the U.S. side of the border, creating within the larger fabric of the transfrontier metropolis a twin plant system of U.S. investors/managers and Mexican assemblers. These global factories are very profitable for both sides. Mexicans charge dollarized rents and gain wages for a growing army of industrial workers (one million at last count), while U.S. (and other foreign) companies save millions of dollars in labor costs. This sector brings an estimated three billion dollars of annual income to Mexico.

Transnational Housing and Land Markets

Urban dwellers in the transfrontier metropolis consume not only goods and services on both sides of the boundary, but housing and land as well. NAFTA is spurring the purchase/lease of land by global investors along the border, particularly in the Baja California region, where plans for international resorts, hotel complexes, commercial
development, and luxury housing are abundant. Baja California already has the second largest enclave of expatriate American homeowners (the largest lies in the Guadalajara region), with some 15,000-20,000 Americans residing in homes along the Baja California coast. Meanwhile, increasing numbers of Mexican immigrants, as they legitimate their work and immigration status, are purchasing homes on the U.S. side of the border. Some members of a family may live on the U.S. side, while others remain on the Mexican side. The hard edge of political demarcation the physical boundary line begins to blur. The larger transfrontier region becomes the true urban life space of the border dweller, a more precise spatial construct for defining the experience of binational urban families.

**THE TRANSFRONTIER ECOSYSTEM**

The activity systems discussed earlier are the behavioral links that sit within the larger transfrontier ecosystem that defines each transfron-
Such a model can be illustrated below. This model, of course, simplifies a much more complex ecosystem of feedback loops and overlapping environments. However, it is useful for the purposes of understanding ecosystem management, which, in the model, is a function of three controls over transborder spillover effects those in built environment, the natural environment, and the human environment. Thus, it can be seen that the natural environment cannot stand alone; it must be regulated in concert with the design of the built environment, and with the regulation of human behavior. Due to the changing nature of boundaries late in the twentieth century, it becomes clear that any change in the built environment or in human behavior on one side of the international border may have immediate spillover consequences on the other side. Thus ecosystem management along the border becomes an inherently international process, and requires new and innovative forms of cooperation and planning. Further, as Table 1 suggests, the mediating force between the natural and human (politics, government) environment is the built environment. Thus, from the perspective of cross-border policy-making, more attention needs to be directed toward managing the built environment along the Mexican-U.S. border.

Cross-Border Planning and Cooperation in the Transfrontier Metropolis.

An empirical examination of recent border region infrastructure projects is presented in Table 2, which lists projects by category (transport, land use, environment), region, project type, and lead actors. These data were gathered over a two-month period from first-hand interviews, public documents, internet websites, and library archival sources. Table 2 does not represent a comprehensive list of all border region projects, but rather an approximation of the scope of projects in the planning stages, under construction, or recently completed. Several observations can be made about these data: (1) The lead actors range from local, state, and national political jurisdictions to private companies, quasi-public economic development agencies, NGOs, and cross-border coalitions; there is no single formula for political administration of border projects; (2) large cities like Tijuana-San Diego are developing more cross-border projects than smaller ones; (3) transportation and environmental projects dominate the landscape at this point. Transport projects like roads, airports, and rail
### Table 2: Recent U.S.-Mexican Border Region Infrastructure Projects (planned, in progress, or completed)

<table>
<thead>
<tr>
<th>Location</th>
<th>Category</th>
<th>Project</th>
<th>Lead Actor(s)</th>
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<tbody>
<tr>
<td>San Diego-Tijuana</td>
<td>Transport</td>
<td>Twin Ports/airport</td>
<td>City of San Diego</td>
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<td>Port of entry, Otay Mesa</td>
<td>County of San Diego</td>
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<td>San Diego-Anaheim Littlerail Line</td>
<td>Metropolitan Transit Development Bd. (MTDB)</td>
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<td>Virginia Ave. Border Crossing, San Ysidro</td>
<td>U.S. and Mexican federal government</td>
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<td>Intermodal Transport Facility</td>
<td>California Department of Transportation (CALTRANS)</td>
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<td>Freeway Rs. 905, 125</td>
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<td>Widening Otay Mesa Rd.</td>
<td>City of San Diego</td>
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<td>Tijuana Light Rail Transit</td>
<td>Mun. of Tijuana</td>
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<td>Tijuana 2000, peripheral hvy. Ring</td>
<td>SAFETRANS</td>
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<td>International Ave.; Circulation plan for border crossing</td>
<td>Mun. of Tijuana</td>
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<td>Road Improvements</td>
<td>Mun. of Tijuana</td>
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<td></td>
<td>Land use</td>
<td>International Gateway, mixed use development</td>
<td>Land Grant Development (private) with City of San Diego</td>
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<td>Tijuana pedestrian space development at border crossing</td>
<td>Mun. of Tijuana</td>
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<td></td>
<td>Environment</td>
<td>Wastewater treatment plant</td>
<td>National Development Bank (NDBank/RECC) NDBank</td>
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<td>Estuarine expansion</td>
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<td>San diego border wastewater</td>
<td>City of San Diego</td>
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<td>Treatment plant, San Diego</td>
<td>Pacific Gas and Electric (private)</td>
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<td>Border Power Plant</td>
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<td>Tucate-Tecate</td>
<td>Transport</td>
<td>Expansional/align border crossing</td>
<td>General Services Admin. (federal)</td>
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<td>Rte. 94 expansion</td>
<td>CALTRANS</td>
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<td>Land use</td>
<td>Renovate rural land for urban development near border crossing</td>
<td>County of San Diego</td>
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<td>Caliente-Mexicali</td>
<td>Transport</td>
<td>New port of entry</td>
<td>C.S.A. Imperial County, Mexican government</td>
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<td>Bridge, All American Canal</td>
<td>Imperial County</td>
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<td></td>
<td>Environment</td>
<td>New River cleanup</td>
<td>Imperial County, U.S. Congress</td>
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<td>Salton Sea reclamation, Imperial County, California</td>
<td>U.S. Bureau of Reclamation, Salton Sea Authority</td>
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<td>Wastewater treatment plant, Maticali</td>
<td>NDBank</td>
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<td>Land use</td>
<td>Redesign border crossing</td>
<td>City of Caliente</td>
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Table 2 Continued

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<thead>
<tr>
<th>Location</th>
<th>Transport</th>
<th>Environment</th>
<th>Land use</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>Yuma-San Luis Rio Colorado</td>
<td>New border crossing at San Luis Rio Colorado</td>
<td>Water supply and wastewater treatment, Naco, Sonora</td>
<td>Expansion of downtown Columbus, National Historic Landmark</td>
<td>City of Yuma, Arizona Highway Department</td>
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<td>Access road to I-8</td>
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<td>City of Yuma, State of Arizona</td>
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<td>Airport expansion, foreign trade zone</td>
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<td>City of Yuma</td>
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<td></td>
<td>Rail line</td>
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<td>Mathews Group (private)</td>
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<td></td>
<td>New commercial port</td>
<td>Wastewater treatment, Naco, Sonora</td>
<td>Expansion of downtown Columbus, National Historic Landmark</td>
<td>Arizona-Mexico Commission, U.S. and Mexican federal governments</td>
</tr>
<tr>
<td>Columbus, New Mexico-Palomas, Chihuahua</td>
<td>Water supply and wastewater treatment, Naco, Sonora</td>
<td>Wastewater treatment, groundwater protection</td>
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<td>City of Columbus, New Mexico</td>
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<td>City of Nogales, Arizona</td>
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<tr>
<td>El Paso-Ciudad Juárez</td>
<td>Replacement of Cordova International Bridge of the Americas</td>
<td>C. Juárez Wastewater Treatment Plant</td>
<td>Expansion of downtown Columbus, National Historic Landmark</td>
<td>State of New Mexico, City of Columbus, New Mexico</td>
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<td>Wastewater treatment plant, El Paso colonias</td>
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<td>City of El Paso, Muni. of Ciudad Juárez, Texas Natural Resource Conservation Commission, EPA</td>
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<tr>
<td>Eagle Pass-Piedras Negras</td>
<td>Second international bridge, international airport, Hwy. 57/55</td>
<td>Air quality monitoring systems</td>
<td>Expansion of downtown Columbus, National Historic Landmark</td>
<td>City of Laredo, Muni of N. Laredo, EPA-Border XXI</td>
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<td>City of Laredo, Muni. of N. Laredo, EPA-Border XXI</td>
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<td>City of Laredo, Muni. of N. Laredo, EPA-Border XXI</td>
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Cross-Border Planning and Cooperation

Table 2 Continued

<table>
<thead>
<tr>
<th>McAllen-Reynosa</th>
<th>Transport</th>
<th>Expansion of International Bridge</th>
<th>McAllen Bridge Board, City of McAllen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Wastewater treatment plant</td>
<td>USDA, Texas Water Development Bd., NADB, and BEEC</td>
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<tr>
<td>Land use</td>
<td>Reynosa colonias housing improvement</td>
<td>McAllen Economic Development Corp., Mexican government</td>
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<tr>
<th>Brownsville-Matamoros</th>
<th>Environment</th>
<th>Toxic chemical monitoring of maquiladoras</th>
<th>City of Brownsville, U.S. and Mexican state and federal governments, Coalition for Justice in Matamoros</th>
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</thead>
<tbody>
<tr>
<td>Wastewater treatment plant, Matamoros</td>
<td>State of Texas, Mexican federal government</td>
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</table>

lines are seen as positive assets to accompany cross-border economic development in the spirit of NAFTA. Environmental projects address immediate infrastructure needs to cities and towns with resource management problems. The glue that ties together the environment and the economy is land use literally the form and functioning of urban regions, and this is the category of project development that is least coordinated on a binational basis. Clearly, one of the missions for the twenty-first century will be to better balance ecology and economy through land-use planning.

The Challenge of Cooperation

One of the more difficult elements in cross-border planning for development lies in the area of institutional cooperation. Most experts divide institutional cooperation into two prototypical models: formal and informal. Formal cooperation involves agreements between national states in the form of treaties, presidential meetings with memoranda of agreement, or interparliamentary negotiations. Formal accords can lead to permanent cross-border institutions, including decision-making bodies either with jurisdictional or advisory status. Informal accords include regular meetings among local and higher government authorities, as well as nonbinding agreements to cooperate on local matters ranging from criminal justice to pollution control and from firefighting to traffic management.

Cross-Border Cooperation in Western Europe

An excellent example of successful cross-border cooperation that combines both formal and informal agreement is the various trans-
frontier planning programs in Western Europe. Anchored by the European Community and its social parliamentary cousin, the Council of Europe, this region is blessed with a number of attributes that facilitate transborder cooperation: geographic proximity and historically integrated border regions, a common fate in economy and defense that tends to tie nations together, and relatively similar economic levels across nation-state boundaries. This relative homogeneity and sense of common cause has been partly responsible for the proliferation of transfrontier planning programs beginning more than two decades ago. Especially notable have been cross-border programs of environmental cooperation and economic development along the Swiss-German-French, Swiss-Italian, French-Belgian, Dutch-German-Belgian, Spanish-French, and other European borders. Most of these programs have involved a combination of formal agreements between national governments, often negotiated in the Council of Europe, and informal arrangements across borders between officials and private entrepreneurs who are familiar with one another.

Perhaps the most important and successful example of European transfrontier planning is the Regio-Basiliensis, a regional planning entity in the Swiss-German-French border region near Basel, Switzerland. More than two million people live in the trinational urbanized region surrounding the city of Basel. Over one hundred thousand commuters travel into Switzerland to work on a daily basis in this region. Beginning in the 1960s, the framework for cross-border cooperation was established between the Swiss cantons, local universities, and Swiss industries. By 1975, the French and German authorities had formally joined in the process, and a commission of eight members was formed, with all members appointed by the foreign ministries of the three nations. Regional committees were set to represent the two ecological subregions: the north and south Upper Rhine River areas. Further, a number of smaller, informal committees were set up, including the Upper Rhine Regional Planners. The Commission and the various regional and informal working committees meet regularly throughout the year. They address several basic planning problems in the region including traffic/transportation, culture, economic development, and the environment. The Regio-Basiliensis, which has become the planning arm of the Commission, has had great success in the area of transportation planning. Its crowning achievement was the construction of a trinational airport in Mulhouse, France, that serves the cross-border region. A more difficult problem has been that of nuclear power plants and their impact on the environment. Before the Regio came into existence, the three nations were concentrating too many nuclear plants in this border region, and
they would all need to use the Rhine river for cooling, causing irre-
versible ecological problems for the river. Trilateral planning and
coordination allowed the local governments to demonstrate the long-
term dangers of this trend, and the location of additional plants here
has been curtailed.

Regional leaders in the Swiss-German-French borders recount that
coordination is easier to achieve at the local level than at the nation-
al level, and that is one of the great advantages of informal cross-bor-
der coordination. It brings nations together over common interests
(environment, economy, and so forth). The spirit of cooperation in this
case is enhanced by the progressive leadership in the Council of
Europe, where transborder concerns are given a high priority. The
problem, however, is that none of the members of the Commission
actually sits on the European parliament, thus limiting the political
clout of this program. Further, it must, in the end, be acknowledged
that the principal force behind the Region is economic large pharma-
ceutical companies in Basel seek markets in neighboring countries
and want to ensure the stability of their home region.5

The Mexican-U.S. Border Region

The Mexican-U.S. border region brings together not only a plethora
of government agencies at the federal, state, and local levels, but two
different cultures Mexico and the United States with distinct
values and philosophies about cities, land development, and the
environment. Equally important, the border brings together nations at
derent stages of economic development. The United States is
world economic power, while Mexico is a developing nation with a
long history of economic dependence on the United States. At the
border, Mexico’s dependence is underscored by the two most impor-
tant border phenomena of our times: immigration and assembly plants (maquiladoras). Both are driven by the opportunities the border created, either for illegal workers crossing to the north, or for cheap labor enclaves that bring multi-national capital to the region. There must always be an awareness of these basic economic asymmetries that lie at the core of the U.S.-Mexican border relations.

Further, both the United States and Mexico have dramatically different forms of government and notions of politics. A somewhat dated case study of political officials along the California-Mexico border at Tijuana-San Diego reveals how the constellation of concerns differs among public officials. In an early 1980s survey, public officials on either side of the border were asked what the major issues facing the San Diego-Tijuana region were. The results are cited in Table 3.

While this study is dated, its contents reveal some universal facts about cross-border public policy making. Economic development is the engine of cross-border shared consciousness, and both sides have shared a concern for it since the 1980s. However, Mexicans are also burdened by their economic shortages, which at times manifest in the form of unemployment, but, more importantly, continually plague the border with the vast deprivation in the colonias or unplanned squatter settlements that dominate the formation of Mexican border cities. U.S. officials feel the weight of those concerns, but express more immediate quality of life concerns about the negative spillover effects of Mexican border towns in the form of undocumented immigrants, sewage spills, flooding, air quality, and the generally negative image of Tijuana, which affects not only San Diegans, but outside business investors as well.

More recent studies have suggested a number of general and specific barriers to cooperation. General barriers might include language, culture, initiative, and politics. Many public officials from El Paso to San Diego lament their inability to speak Spanish. Even when officials do actually speak both languages, there are still problems in understanding the nuances of meaning and tone in face to face interaction. Mexican officials have expressed the opinion that their U.S. counterparts do not really understand Mexican culture, and this may cause them to cling to a proud kind of nationalism in dealing across the border. Further, U.S. officials must always be aware of the differences in power, wealth, and development that underscore Mexican-U.S. relations. These differences have in the past led to what many observers have called a lack of initiative on both sides in moving beyond informal discussions to real policy making. For many years there was a consensus of agreement about common goals, but no real substantive implementation of change. This is changing in the 1990s, with the
jolt given to the border by NAFTA, and the recognition of the inevitability of change.

Still, the biggest differences remain in the area of politics and governance. The United States has traditionally been the more decentralized federated government. Now Mexico is rapidly moving toward devolution of power to states and municipalities, although this process will take several decades to complete. In government, in the past, the United States has favored a civil service, merit-driven organization of managers, while in Mexico the management system was more tied to political affiliations. This too will soon change in the post-NAFTA era. Meanwhile, both nations have vastly dissimilar legal systems, with the U.S. system derived from British common law, and the Mexican from Napoleonic codes. The countries' actual laws vary in terms of individual rights, property, land-use law, business law, and so forth. Notions of private rights and public interest, vital to such areas as land use, property, and environmental law remain distinct on either side of the border.

These differences will not likely continue to have the same influence on cross-border cooperation that they had in the past. However, a recent anecdotal survey of some U.S. border officials suggests that cooperation is still plagued by the obstacles of the recent past. From Brownsville to San Diego, border government officials and observers continue to worry about the lack of interaction with their Mexican counterparts. Most of their biggest concerns were expressed at the local level; for example, one Imperial County official said, 'We've tried in the past years to set up meetings with planning officials in Mexico, but we haven't had success. Administrations in Mexico change every six years, and we can't seem to keep things going.' Another official in California said, 'We still only include our side of the border on our planning maps. Yet another local planning official on the California border said, 'I used to talk regularly with people in Mexico. But they are all political appointments, and they move on. I haven't had much contact lately.' In Naco, Arizona, one local businessman stated that, 'There's really not anything here to work out with Mexico. In Arizona, a prominent business and management consultant said, 'At this point our interaction with Mexico is somewhat limited, but our goal is to promote cross-border dialogue.' A Mexican professor in El Paso stated that there is no formal mechanism for cross-border planning in El Paso-Ciudad Juárez partly because El Paso doesn't believe it really needs Juárez to survive.

Still, almost all of the local officials surveyed regularly meet with their Mexican counterparts, and are very anxious to promote cross-border cooperation. As one administrator in the county of San Diego
For people in our district, it's a cross-border culture. This same official made an important point that is echoed by all of the U.S. and Mexican officials interviewed: the best form of interaction currently is informal. Said the San Diego official, Most of our interaction is informal. We all know each other. That's what works best for U.S. and Mexican officials.

Studies have shown that the best interactions are usually informal, face to face, and one on one. This seems to work much better than written or telephone communication. Many innovative local and informal arrangements, in the form of task forces and the like, have been successful in familiarizing all parties with local issues and in implementing projects. The categories of successful informal work include planning, construction and maintenance of international bridges, joint health and air quality monitoring, technical assistance, emergency management, fire control services, tourism promotion, cross-border education, and cultural activities. Some of the problems faced in the area of binational land-use planning are the divergent objectives of planning, the different regulations and codes and other tools on each side of the border, and the traditional divisions in the location of authority over planning decisions. Many of these differences can likely be mitigated in the future by better anticipation and understanding, a luxury that previous generations of planners did not have.

In a more practical sense, cross-border cooperation often is mediated in the physical space of the actual border crossings, since it is here that all of the people, capital, goods, and technology that fuels the border economy must pass. A number of problems plague international border crossings, including inadequate staffing that causes traffic flow problems; poor coordination between government agencies, both within and across borders; dismally slow processing of commercial traffic; an absence of efficient regularization of regulations to facilitate cross-border trade; port facilities that are not large enough to handle the volume of traffic that passes through them; and inadequate transport facilities connecting to the border crossings from surrounding regions.

CASE STUDIES: RECENT SUCCESS STORIES IN CROSS-BORDER PLANNING AND COOPERATION

Notwithstanding all of the problems and obstacles to cross-border cooperation discussed in this report, there are a number of promising and innovative programs and examples of cutting edge border planning that must be carefully scrutinized. Clearly, border planning and cooperation remain works in progress. The following is a summary of some of the trends in border cooperation.
Innovative Public Sector Border Alliances

Many experts recognize that border decision making has not functioned well when it is restricted to either foreign policy circles at national levels, or informal dialogue at the local level. Recently, concerned policymakers have searched for a balanced mechanism that brings together various institutional levels into cross-border alliances, with an emphasis on self-government, economic development, and border management. Several examples can be cited:

- Border Liaison Mechanism (BLM) is a product of the U.S. State Department and the Mexican Ministry of Foreign Relations and seeks to bring local, state, and federal officials from both sides of the border together to deal with common border problems. Through a series of task forces on matters such as trade, tourism, movement of goods, public safety, education, and culture and migrant protection, key officials engage in frank discussions and seek to integrate their dialogue to the larger formal decision-making processes.

- Consultative Mechanism is a Mexican initiative that brings Mexican consuls in U.S. border cities and INS district officials together to deal with local economic, law enforcement, labor, human rights, and related issues. The purpose of the initiative is to bring federal officials together with local and regional actors.

- State Alliances are agreements between bordering U.S. and Mexican states to commit to long-term economic development by creating a binational regional strategic plan at the twin-state level. An example is the 1993 Strategic Economic Development Vision for the Arizona-Sonora Region. This plan emphasizes cross-border clusters of industry and seeks to develop strategies to make the Arizona-Sonora region globally competitive by promoting linkages and reducing cross-border barriers. Each state has an organization that oversees the process the Arizona-Mexico Commission on the U.S. side, the Comisi n Sonora-Arizona on the Mexican side. Among the many impressive projects in this cross-border alliance is a proposal called Unified Border Port Management, which seeks to find ways to streamline procedures at the ports of entry through a pilot project that focuses on more efficient movement of goods and people over the international boundary.

- The U.S.-Mexico Border Counties Coalition was created in 1998 by the 24 border counties on the U.S. side as a way of...
increasing their political visibility and effectiveness in getting the attention of federal governments to address border issues. The counties wanted a unified voice nationally to address the varied and growing list of problems within their jurisdiction, including indigent health care, housing, illegal border crossings, fire suppression, criminal justice costs, and patient dumping by federal agents (border patrol) into county health care facilities. The purpose of the coalition is to get all of the counties working together to create good border policy making. This group has not yet brought in partners on the Mexican side, but the idea is promising. Recently, there has been a split between San Diego County and the other border counties over how to administer the project.

Empowerment Zones are poles of development in less advantaged areas of the United States supported with federal monies to strategically jolt the local economy, a project that the Clinton administration continues to promote. The Lower Rio Grande Valley Rural Empowerment Zone has directed some $40 million toward long-term regional economic development planning. Probably the biggest contribution the empowerment zones can make is in addressing the problem of border colonias, or unplanned construction of makeshift homes, often without services, in rural zones on the edges of metropolitan areas in Texas and New Mexico, as well as more sporadically in California and Arizona.

Councils of Government (COG) are coalitions of U.S. border counties and/or cities that join together to address regional planning issues. An example would be the Lower Rio Grande Development Council that undertakes transportation planning in Hidalgo County and adjacent areas. It also promotes coordinated regional development.

Federal NAFTA-Driven Liaisons

With NAFTA, a set of new institutions were created to oversee the environment and infrastructure needs of the states along the Mexican-U.S. border. These institutions include Border XXI, Border Environment Cooperation Commission (BECC), North American Development Bank (NADBank), along with the existing International Boundary and Water Commission (IBWC). A comprehensive advisory group, the Good Neighbor Environmental Board, was established to advise the president and Congress regarding environmental and infrastructure needs and issues of the border region. The Border XXI
workgroups have been impressive in the scope of functions and the degree of local involvement on such issues as air quality, water, hazardous waste, emergency planning, and natural resources.

Private Cross-Border Coalitions

Private cross-border coalitions seek to enhance cross-border cooperation using economic development as the anchor. Many of the binational urban regions have cross-border chambers of commerce and other economic coalitions. These coalitions not only handle economic development matters, but they also focus on managing investments, environmental concerns, housing and community development, public space, and the provision of services to poor communities. For example, in McAllen-Reynosa, on the Texas border, the McAllen Economic Development Corporation has an International Relations Committee, which, among other concerns, seeks to assist the city of Reynosa with its housing shortages for its poorest inhabitants. For more than three decades Texas has been gradually fashioning a series of cross-border alliances, many driven by private sector economic development concerns, but some branching out into social and cultural arenas as well. In Ciudad Juárez-El Paso, the World Trade Center has been an important cross-border cooperation mechanism for the region. In the middle and lower Rio Grande region, the Rio Grande Valley Partnership has been set up to forge cross-border communication and cooperation on a variety of economic development issues. In Arizona, the state-to-state alliance mentioned earlier brings public and private interests together to determine the strengths and weaknesses of the region, and ways of expanding its connection to the global marketplace. In Southern California, a number of regional groups bring the private sectors together to discuss regional economic development. The U.S.-Mexico Border Chamber of Commerce links private interests at San Diego-Tijuana, as does the San Diego Dialogue, a public-private coalition seeking to coordinate cross-border efforts to grow the regional economy.

Local Programs

For a variety of reasons (history, geography, politics), some twin city regions have managed to create better cross-border liaisons than others. A few examples of successful local initiatives include:

- Instituto Municipal de Investigación y Planeación (IMIP), Ciudad Juárez, has a long history of centralized urban planning
and administration. Local governments have traditionally been weak and underfunded, while the power over municipal planning and financing of infrastructure lie at the state and federal levels. Since the early 1990s, Mexico has been rapidly moving toward a decentralized political system, with the power to tax and spend shifted to municipal governments. The creation of municipal planning agencies represents an attempt to have independent city planning agencies that function without direct connection to the political party that controls the local and state government. These agencies receive their own funding and carry out research and planning autonomously.

IMIP in Ciudad Juárez, has carried out some impressive empirical research on cross-border transportation in the Ciudad Juárez-El Paso region, including a detailed travel forecasting model.

The Sonoran Institute. This is a small initiative linked to the University of Arizona that promotes community-based ecological development. It is involved in projects that include repair of riparian ecosystems, development of ecotourism programs, and community workshops in rural areas.

Dos Laredos. The Laredo-Nuevo Laredo region must be cited as an example of good cross-border cooperation through local, informal linkages. As early as 1881, an engineer hired by the Mexican government created a binational town plan for the two Laredos. Both cities were laid out in a similar plaza-street gridiron system, and this early parallel urban structure has reinforced the sense that the towns development is intertwined. Both cities established planning departments about ten years apart, Laredo in the early 1980s, Nuevo Laredo in the early 1990s. By the 1990s, both cities acknowledged they needed to work together to address their common explosive growth. They created a joint urban plan and identified a set of common actions needed to unite them environmental protection, tourism development, traffic management, and historical and cultural protection. This Joint Urban Plan, La Carta Urbana de los Dos Laredos, has been supported by both the U.S. and Mexican federal governments, and has been followed by a Joint Environmental Management Plan (funded by the EPA Border XXI program) and a joint historic preservation program. The political atmosphere appears to be in place to implement cross-border planning and environmental management.

The San Diego-Tijuana Region. San Diego-Tijuana is the most heavily populated border subregion, and the most economi-
ally polarized as well. The challenges for cross-border cooperation are greater, both because the scale of urban growth is greater, and the differences in economy, lifestyle, and quality of life are more pronounced. While nearly 50 percent of city dwellers in the Ensenada-Tijuana corridor live in conditions of substandard housing and services, nearly three-quarters of Southern California's residents live in relatively luxurious (by comparison) suburban dwellings, with full complement of household services as well as neighborhood amenities such as schools, street lighting, and paved roads, something not all Mexican border dwellers can count on. Yet San Diegans have, in the last two decades, begun to acknowledge the need for cross-border planning and cooperation. Both the city and county of San Diego had border planning offices at one time, although tight budgets in the early 1990s wiped these out. Still there is great concern and attention to the cross-border problems of the region. The city of San Diego continues to address cross-border issues through the City Manager's Office, Binational Planning Program. The county of San Diego holds a U.S.-Mexico Border Summit, that brings together county officials and Mexican officials. The county is heavily involved in cooperation with Mexico on service issues, including criminal justice, agriculture, environmental health, child services, air pollution, and hazardous materials. The San Diego Association of Governments is a regional planning agency that actively works on cross-border planning with Tijuana, especially in the areas of watershed research, energy, transportation planning, data collection, and the environment.

The biggest challenges facing all of these local entities lie in the areas discussed below. Although examples are cited from specific regions, these challenges confront local governments all along the border.

- **Environmental Management.** As early as the 1930s, Tijuana and San Diego discovered that they shared a common ecological domain, most notably the watershed of a regional hydrological and drainage system. Sewage spills from Tijuana to San Diego have plagued the region through the 1990s. Nearly five decades of separate management of Tijuana and San Diego environmental systems must now be replaced by binational environmental management. Twin cities elsewhere along the border have had similar experiences.

- **Transport Infrastructure.** A transfrontier metropolis, by its very definition, is a place where the circulation of people, goods,
and services across the border must be facilitated so that the boundary does not impede the daily economic circuitry of the transnational space. The region must be allowed to fulfill its destiny and become a city/region operating in the global economy. Thus, in Tijuana-San Diego, 600 global factories (maquiladoras) must be able to function within the transfrontier metropolis. Billions of dollars in commercial transactions must be facilitated. Tens of thousands of workers, business persons, and school children need to cross the border to reach their destinations on a daily and weekly basis. To allow the Tijuana-San Diego region to become truly transnational, more sophisticated transportation infrastructure will be needed. This is fully recognized by policymakers in the region, and discussions are under way to create a package of improved transport facilities such as a third border crossing facility, a redesigned border crossing at San Ysidro, a binational mass transit connection between downtown San Diego and downtown Tijuana, cross-border highway linkages, regional port improvements in San Diego and Ensenada (Tijuana’s service port some 70 miles to the south), rail linkage connections from the urban hinterland to both ports, and a binational airport that would serve the transfrontier region. All border cities have significant transportation infrastructure needs.

Urban Design/ Land-Use Planning. The bottom line is that better environmental and transport planning need to fit the design and land-use configuration of the transfrontier metropolis. An interesting project for planners lies in the design of the space immediately adjacent to the international boundary. There has never really been a comprehensive urban design plan for the San Ysidro international border crossing area between San Diego and Tijuana, even though it is the busiest border crossing in North America. The space consists of a chaotic juxtaposition of land uses: warehouses, parking lots, factories, retail stores, an immigration detention facility for illegal border crossers, freeways, residential neighborhoods, commercial strips and commercial centers, open space for wetlands and flood control, and privately owned farms. One of the biggest challenges will be to create a plan that allows for circulation and economic development while not compromising the need for immigration control and surveillance of smugglers. For the international customs and border patrol community, larger populations and higher urban densities represent potential obstacles to efficient transnational law enforcement. Good
design strategies may be able to resolve this seeming contradiction.

CONCLUSION/FUTURE NEEDS

The transfrontier metropolis embodies a new urbanism, where city-regions emerge as bridges between national cultures and as the new spaces from which to launch the global activities of common markets or trade blocs. However, the path toward transnational urban planning is not without obstacles. The Mexican-U.S. border region epitomizes the condition of late twentieth-century urbanism. Notwithstanding the cross-border synergies discussed earlier, transfrontier metropolitan space in this part of the world is notable for its polarized social landscape.

The fusion of divergent styles of urbanism—one Iberian and Meso-American, the other Anglo-European into a single-city region remains very much a work in progress. Several recommendations are offered:

Consolidation

The vast array of government programs, public-private partnerships, regional planning efforts, cross-border task forces, new and old programs of cooperation, and private sector economic development alliances is dizzying in its variety and depth. There are far too many different operations and efforts, and, while all are well intentioned, they either overlap or perform the same tasks repetitively. Some attempt should be made to consolidate cross-border dialogue into a set of uniform mechanisms that are used consistently across the 2,000-mile border from region to region.

Cross-Border Decision-Making Research

This report has uncovered a lack of good recent empirical studies of cross-border cooperation and planning. It is recommended that the EPA and other funding agencies consider immediately organizing a research effort to study cross-border decision making in each of the twin city regions, focusing on the key social, political, and cultural barriers that plague cross-border cooperation. Further, some attempt should be made to understand why some regions of similar size have better informal cross-border relations than others. In general, the positive aspects of face to face Mexican-U.S. interaction and cooperation on planning and environment need to be better understood as


a way of improving the process of cooperation in decision making. If
the border region is moving toward a period of more local control of
the decision process, then it must be analyzed in order to become
more effective. Some attempt might also be made here to incorporate
the successes of the European transfrontier planning models to the
Mexican-U.S. border.

Land Use/Research

Better land-use planning is the glue that makes transportation plan-
ing and environmental management work. It is suggested that fund-
ing agencies and existing programs emphasize joint land-use plans
for twin-city border regions, as well as micro-level design studies of
heavily used border crossings. These studies should be binational in
scope and bring together the key actors from both sides of the bor-
der to study and create joint land-use programs.

Border Crossings/Land-Use Planning

As the data in Table 2 suggest, a great deal of project development
along the border lies in border crossing infrastructure. However, what
is still missing is a set of integrated cross-border land-use plans that
show how improvement of the border crossings fits into the larger
regions and how it will be co-managed by the U.S. and Mexican gov-
ernments. The most striking example is the border crossing at San
Ysidro in Tijuana-San Diego. While it is the busiest crossing along the
entire border, San Ysidro’s land-use configuration is chaotic and
unplanned, something that must be changed if the U.S.-Mexican goal
of economic and environmental integration is to be achieved. Sub-
stantial investment in developing a cross-border land planning
process for the major border crossings along the entire border is
needed, starting with San Ysidro.

Socioeconomic Asymmetry/Colonias

Clearly the major obstacle facing the border region lies in the vast
landscapes of residential poverty in the form of colonias that blanket
urban areas on both sides of the boundary. Existing research on colo-
rias should be channeled into environmental management and other
efforts to create cross-border planning.
NOTES

1. Herzog, Where North Meets South, 139 44.
2. See House, Frontier on the Rio Grande for an excellent review of this dynamic along the Texas–Mexico border.
4. Briner, Regional Planning, 45 53.
6. See Saint Germaine, Problems and Opportunities.
7. See Arizona–Mexico Commission, Arizona Vision Study.
8. All interviews were given on the condition of anonymity.

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Henkel, David. 1995. Seeking solutions for wastewater treatment in Columbus, New Mexico and Puerto Palomas, Chihuahua. Advanced Planning Studio Report, University of New Mexico,
1. Adopting policy, planning and prioritisation frameworks for efficient regional cooperation. Use of specific cross-border frameworks is essential to align the project with national and regional infrastructure plans and ensure appropriate institutional capacity to deliver broader development strategies. Key learnings point toward these global practices: Higher-level frameworks should be implemented within the development strategies of the countries or regions involved, to identify priority projects and consider the bilateral and multilateral trade agreement implications of these projects. Cross-border cooperation has a long tradition within INTERREG and relates to various findings of ESPON projects, not at least the typologies of border regions. ESPON findings show that cross-border cooperation remains a crucial tool for achieving economic and social cohesion in Europe. The aim of this study is to review and cross-analyse INTERREG and ESPON project activities with regard to the territorial dimension of cross-border cooperation. The main question addressed by this project is: Which territorial topics are addressed by current cross-border cooperations and how does this correspond to cross-border institution building as challenge. With regard to the functional task-focus, practical cross-border cooperation approaches in Europe are covering a wide range of material fields of action. Type 4: From this, the demand to develop joint cross-border planning and strategies that can ensure a coordinated, integrated approach in relevant fields arises as a fourth level. Type 5: On this basis, joint decisions can be made, which eventually lead to. Type 6: Shared, integrated and coordinated cross-border implementation of tasks on a sixth level. Planning, cross border strategies and governance structures should be focused to promoting the active involvement and mobilization of local and regional actors in the cross-border cooperation process, and. in implementing several cross-border projects of local/regional significance [40]. One of the more difficult elements in cross-border planning for development lies in institutional cooperation. Most experts divide institutional cooperation into two prototypical models: formal.