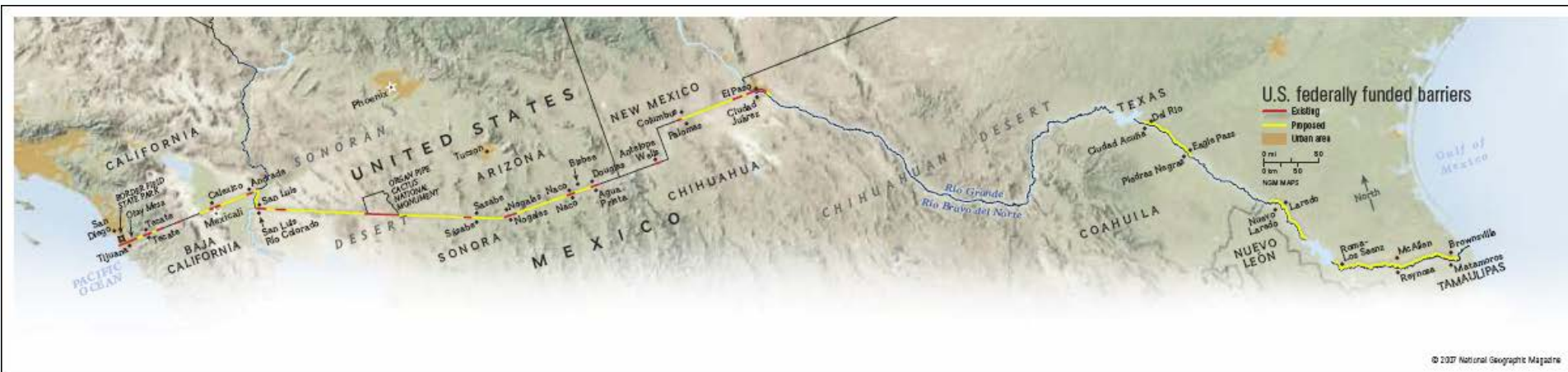


Interaction and Flow of Resources, People and Services



Rosario Sánchez and José Luis Castro



QUESTIONS

- **How do these flows define the dynamics of the region?**

What does the border mean to us?

To the environment?

To economic

development?

To culture?

To politics?

To security?





QUESTIONS

How do these flows define the dynamics of the region?

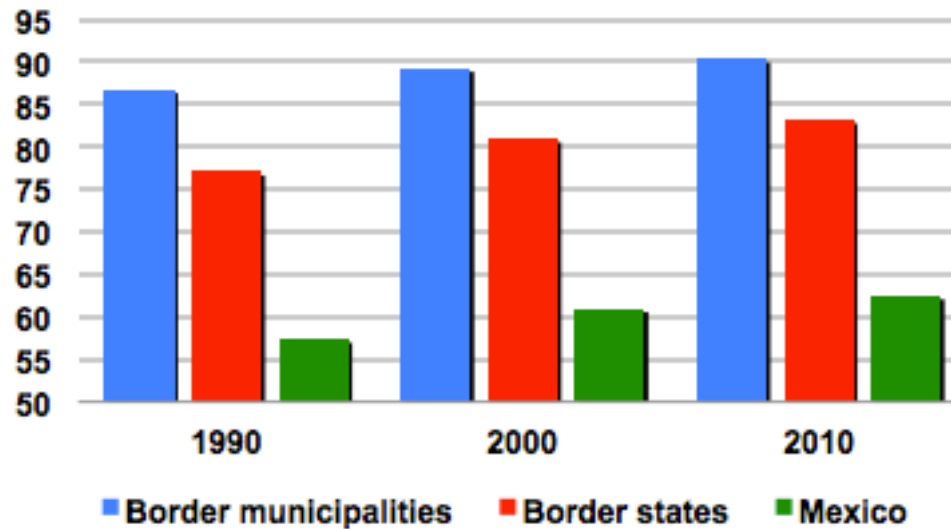
- In 2017, **279 million northbound crossings** took place throughout the border region
- **Mexico is the top foreign tourism** destination for US travelers.
- **Mexico is the No. 1 country of residence for US expatriates.** In 2016, one million US citizens lived in Mexico.
- In 2015, **7.7 million people** lived in 25 US counties across the four border states, while **7.1 million** lived in 37 Mexican border municipios.
- One in 24 workers depend on U.S.-Mexico trade.
- More than 20 percent of U.S. jobs are linked to trade along the border.
- If the area were a single country, it would be among **the five largest economies in the world.**

U.S.-Mexico Border population change, 1940-2016

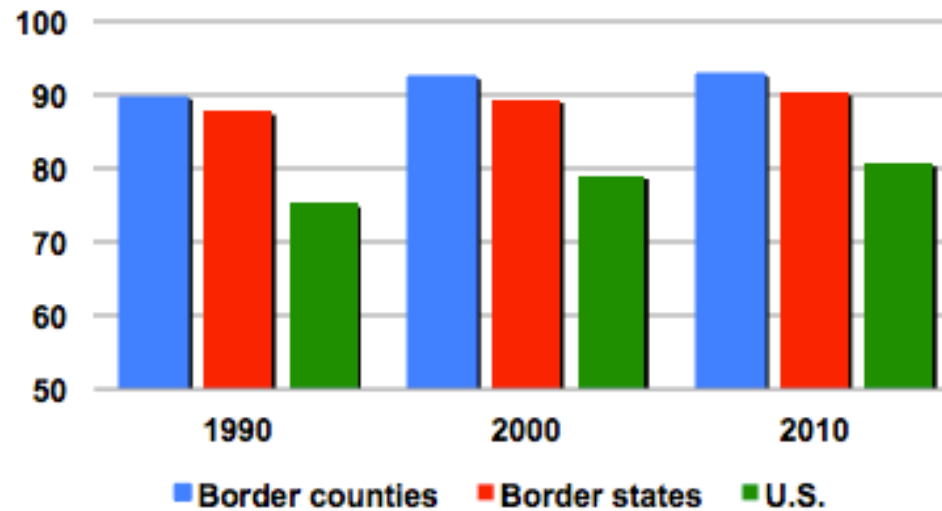
	1940	2015	Change 1940-2015 (%)
Population border states U.S.	14,353,290	75,527,106	426.2
Population border states Mexico	2,617,723	21,238,787	711.3
Population border counties U.S.	899,611	7,706,931	756.7
Population border municipios Mexico	395,386	7,107,045	1697.5

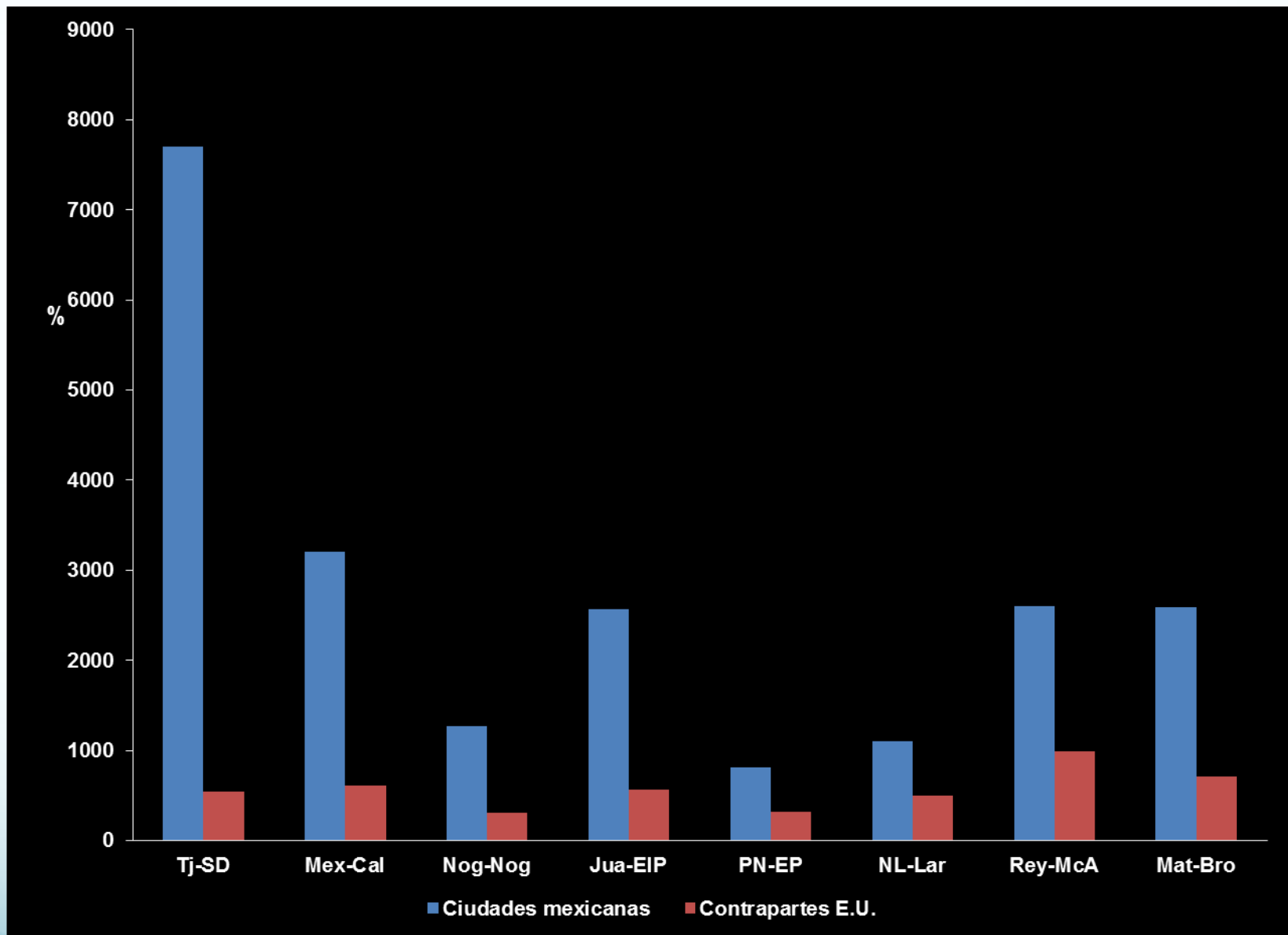
Sources: Unikel (1976); INEGI, Censos de Población, 1980-2010; Conteo de Población, 2015; U.S. Bureau of the Census

Urbanization trends. Mexico



Urbanization trends. U.S.





Pairs of border twin cities. Population change 1940-2010



QUESTIONS

- **Surface water is the only area where a bilateral agreement exists**, as groundwater remains a taboo for binational talks; to make things even more challenging, **the sharing of subsurface data has not been reached yet.**
- Energy intensity per acre-foot of water is also on the rise, and the water and energy nexus has become increasingly important.
- **Energy costs represent almost 40 percent of total expenditures** by all four state water utilities.



QUESTIONS

•What implications are of primary concern?

What are the threats?

What are the priorities?

What are the costs?

- Changes in climatic conditions
- Dependency of some border regions on ground water
- Two highly controlled river systems
- The population of many border cities **will double in 30 years.** The population along the Texas border region is increasing at twice the rate of Texas.
- **U.S.-Mexico trade surpasses \$1 billion every day**, with the vast majority of bilateral commerce crossing our land border.
- Border communities throughout the U.S. southwest **depend on Mexico to keep their economies growing.**
- In 2012, **Mexico was the main export destination for three out of four border states: Arizona, California, and Texas.**



QUESTIONS

How do the sociological factors affect and inform the environmental factors, and vice versa?

What are we actually doing?

Are we prepared?

How resilient is the border region?

How do we cope and plan?

Approximately 300,000 people live in 1,300 *colonias* in Texas and New Mexico. *Colonias* are unincorporated, semirural communities characterized by substandard housing and unsafe public drinking water or wastewater systems.

Sustainability Subindex	
Dimension	Indicator
Clean environmental conditions	<ul style="list-style-type: none">-Management of wastes and clean-up of dumps-Transportation pollution-Water sanitation-Paving coverage in urban areas
Protection of natural resources	<ul style="list-style-type: none">-Water consumption-Preservation of wild areas-Population density in urban areas-Pressure on water resources
Economic development and institutions	<ul style="list-style-type: none">-Water industry efficiency-Energy industry efficiency-Environmental consultancy services-Emergency management
Habitability (parks, recreation and diversity)	<ul style="list-style-type: none">-Sewer coverage-Water coverage-Per capita parks and recreation area-Infant mortality



QUESTIONS

What are the main questions?

- **What can be done to enhance management of fluid resources across various regions?**

Binational agreements?

What level of formality?

What scale?

What resources?

What term?