

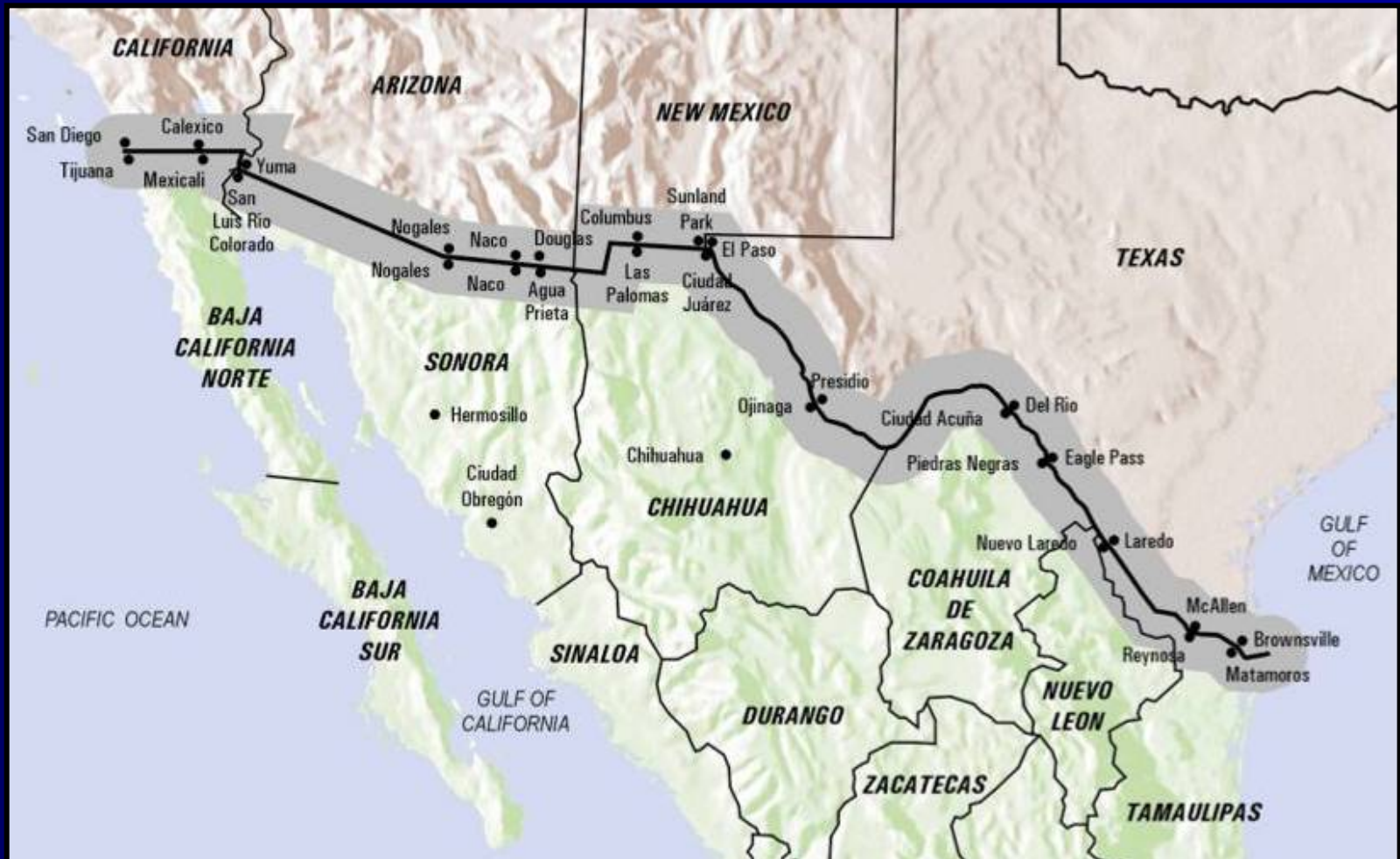
Arizona-Mexico Border Program: A Focus on Air Quality



Plácido dos Santos
Border Environmental Manager
Arizona Department of Environmental Quality

STAPPA / ALAPCO Meeting
San Antonio, Texas
October 24, 2006

U.S.-Mexico Border Region



Arizona-Sonora Border Communities



ADEQ Border Team

Multimedia Responsibilities

- ◆ Ambient Air Quality, Water Quality and Waste Management
 - ▲ Monitoring
 - ▲ Planning
 - ▲ Outreach
 - ▲ Advocacy
 - ⇒ Component - Children's Environmental Health Issues

Air Quality Studies

Projects and Activities

- ◆ Bilingual Ambient Air Quality Monitoring in
Ambos Nogales and Douglas-Agua Prieta
 - ▲ Meteorological Monitoring
 - ▲ Sampling
 - ▲ Emissions Inventory
 - ▲ Modeling
 - ▲ Health Risk Assessment
- ◆ Monitoring underway for
Yuma/San Luis-San Luis Rio Colorado

Ambos Nogales



Nogales, Arizona and Nogales, Sonora

Looking south across the border – January 2004

Air Monitoring Equipment

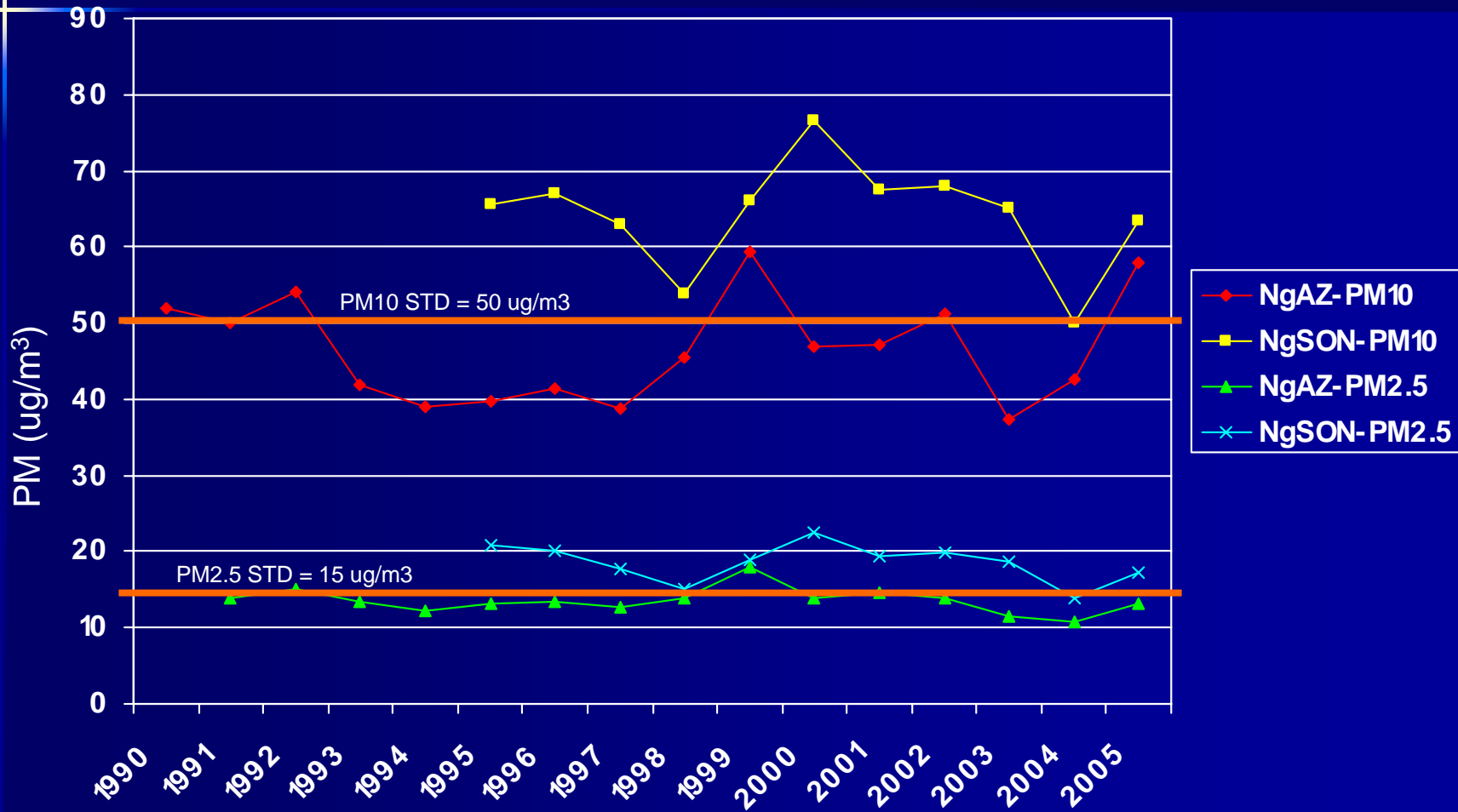


Douglas, Arizona
(PM Partisol samplers)

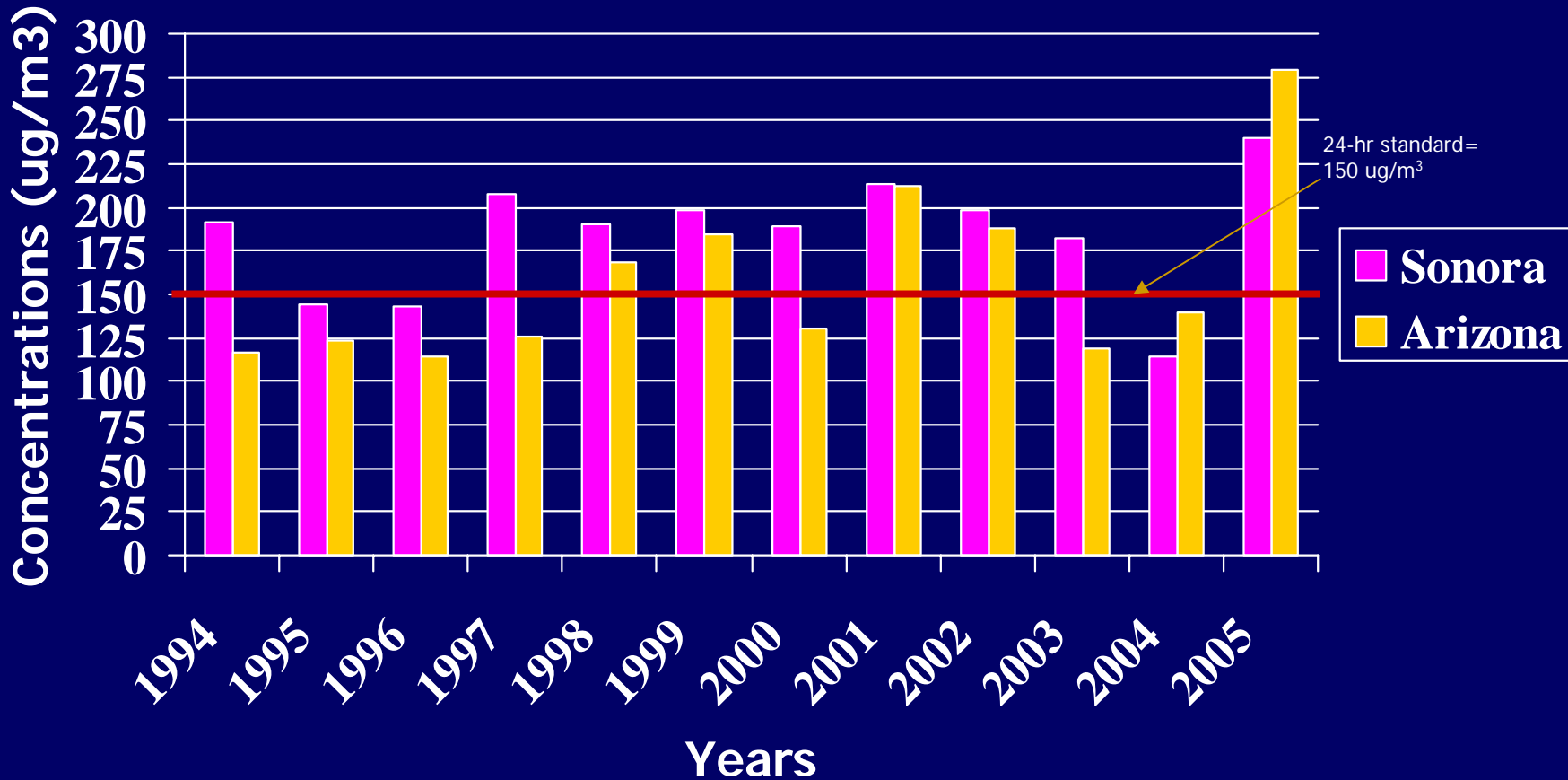
Agua Prieta, Sonora
(co-located with electric power
plant PM monitoring equipment)



Annual Averages for PM10 and PM2.5 Nogales, Az and Nogales, Son



PM10 Maximum 24-hr. Concentrations Ambos Nogales 1994-2005



Some Air Quality Concerns



Air Quality Outreach

Projects and Activities

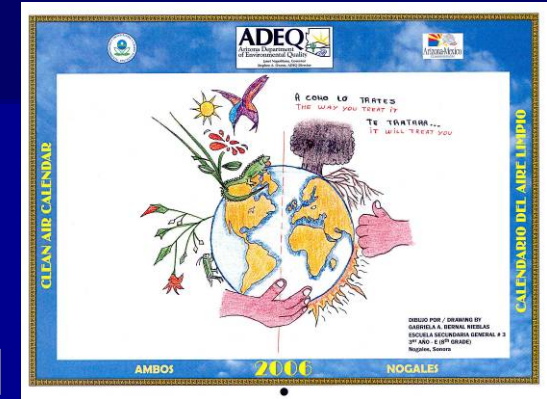
Ambos Nogales

- Community Outreach

- ▶ Bilingual Educational Materials
- ▶ Events (e.g., Drawing Contest and
- ▶ Promotional Materials (e.g., Bumper Stickers)
- ▶ Media Interaction

- Binational Intergovernmental Dialogue

- ▶ Consular-led Border Liaison Mechanism (BLM)
- ▶ Consensus-driven Recommendations



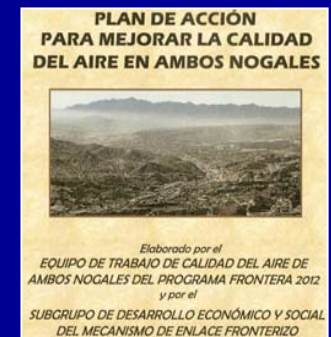
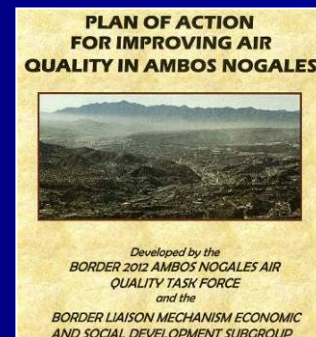
The Nogales Air Quality Plan

12 Recommendations

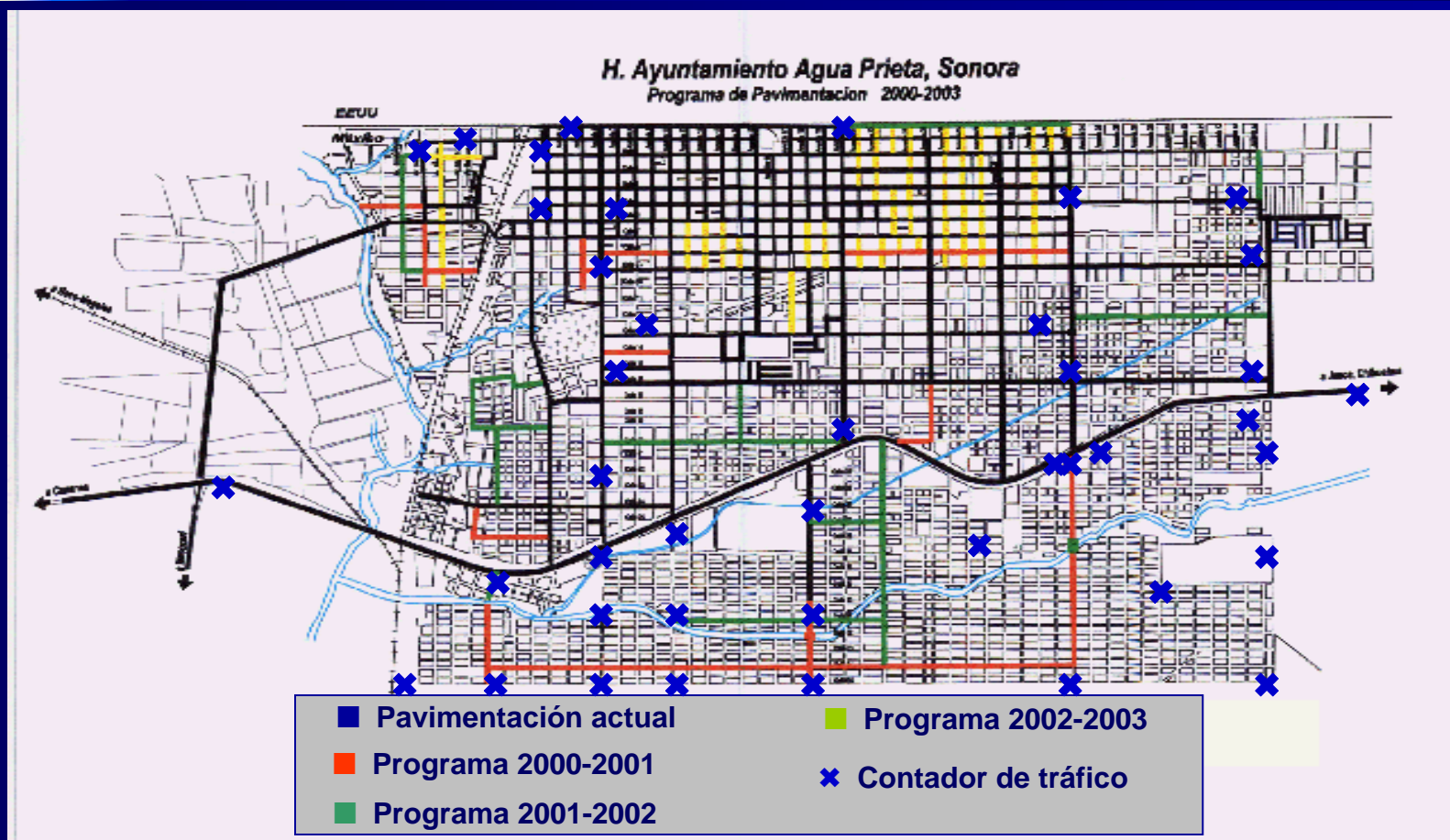
1. Road paving
2. Faster border crossings
3. Vehicular emissions
4. Construct major road corridors
5. Train route impacts
6. Garbage Burning
7. Promote Revegetation
8. Wood Burning
9. Soil Erosion Engineering
10. Establish Recycling
11. Public Transit
12. Improve Traffic Flow



Plan Adoption by Arizona and Sonora
June 17, 2005



Road Paving Plan with ADEQ Traffic Count Locations Locations Agua Prieta, Sonora



Paving and Road Expansion Agua Prieta



Western, Arizona / Sonora, Mexico Border Air Quality Study



Author: TS Summers
Date: Jan 2003
File: yumasmall

Legend

- | | |
|------------------|------------------|
| Baja Site | Sonora Site |
| Cortez Site | Yuma Mesa Site |
| Dome Valley Site | Yuma Valley Site |
| San Luis Site | Yuma West Site |

0 2 4 8 Miles

Disclaimer Information:
This map is a (WORKING DOCUMENT), it is designed for (FIELD STUDIES), presentation and discussion and is subject to change and further refinement.

Brick "Kilns" – "Hornos" Ladrilleros San Luis Río Colorado



Children's Environmental Health *Projects and Activities*

- ◆ Asthma Outreach to Border Communities
- ◆ Schoolbus
 - ▲ Biodiesel Fuel



