

Education

Bridging the Gap



America Mexico



America and Mexico are neighbour country. Divided by a long national border, America and Mexico have huge difference between policy, economy and culture. In aspect of education, Mexico has poor education background including high drop rate in secondary school level, education resources are shortage such as teachers and school buildings. People who are lack of skills can only get informal jobs like street vendors without insurance or good income.

My research questions is how to solve the problem that many Juarez student can't get good public education in the city but have to cross the border to study in American schools? How can help people in Juarez overcome the skill gap as well as improve their living quality? What is different when design the school for students of USA and Mexico? How can the border effect architecture design? How does my project help with changing the living situation of Juarez's citizens?

Name	Xingxing Pan
Student Num	617403369
Tutor	Stefan de Koning

[Redacted text]

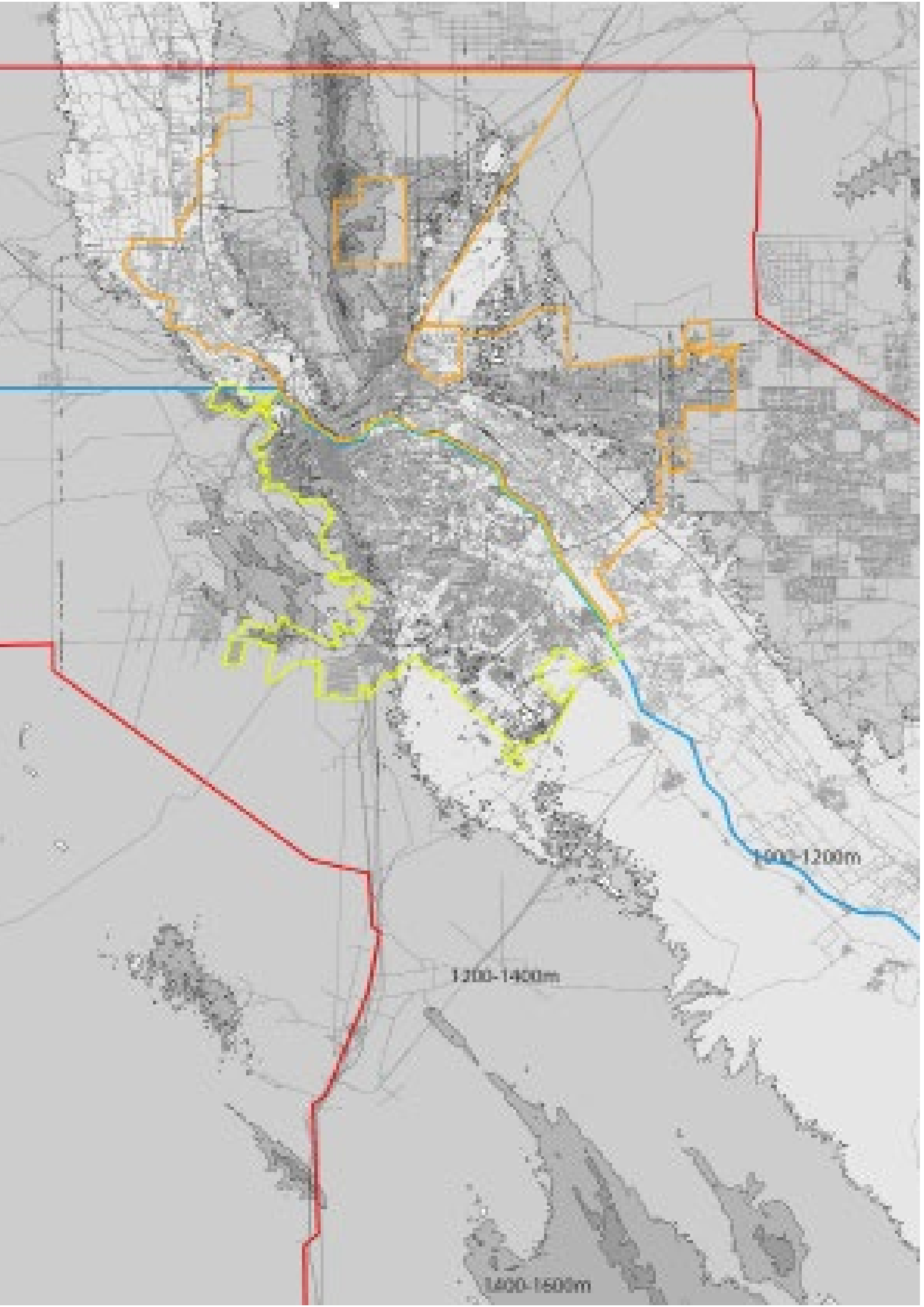


[Redacted text]

[Redacted text]

El Paso Juárez





INFRASTRUCTURE

Railway Network

UP

- Lordsburg Subdivision
- EL Paso Subdivision
- Valentine Subdivision
- Fort Bliss Ind. Lead

BNSF

- Carrizozo Subdivision

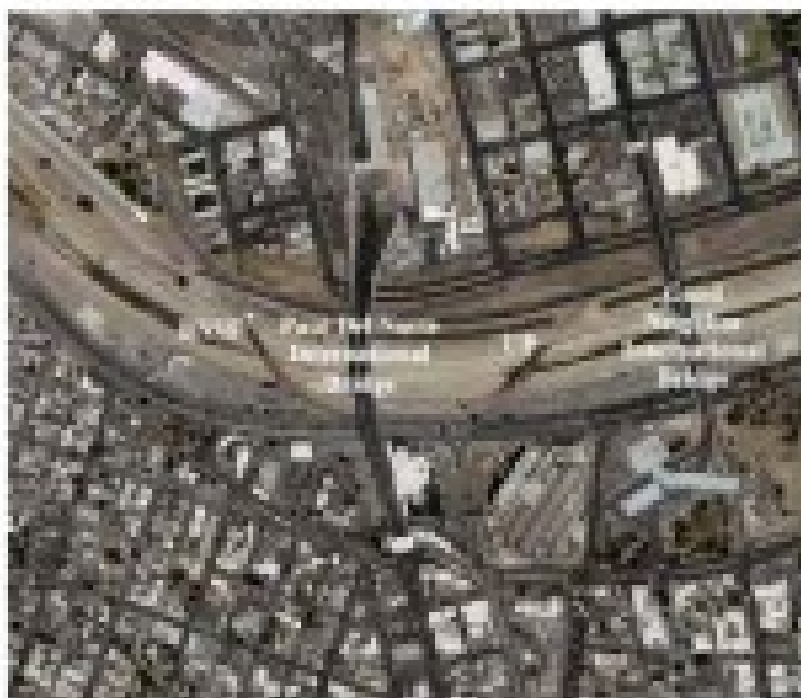
Station

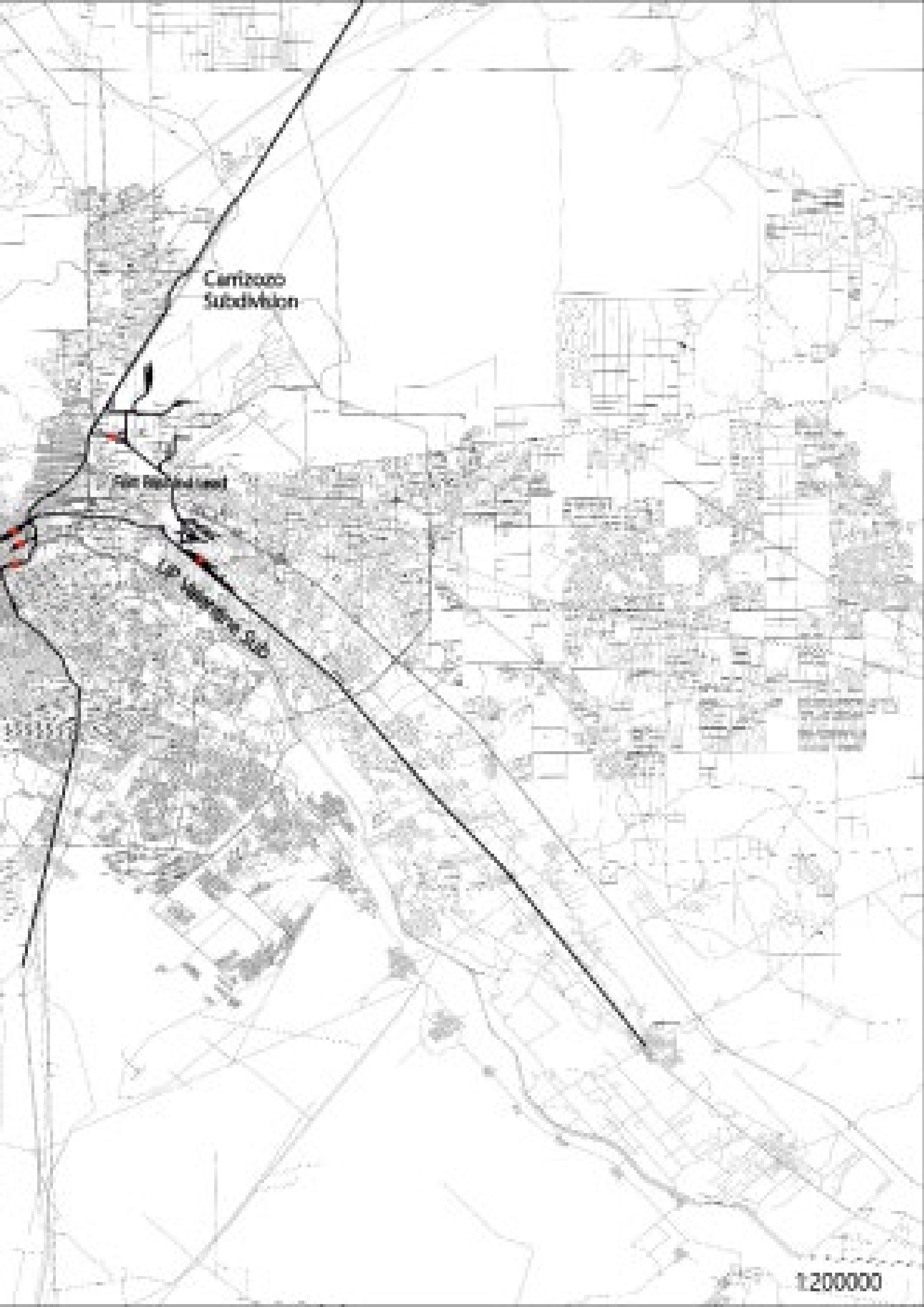
- Santa Fe
- International
- Mopac
- Dallas Street
- Alfalfa
- Fort Bliss

Shortline Railroads

- South Orient Railroad

More than 535 miles of mainline railroad tracks, 8 miles of rail bridge structures, 6 rail yards, and 3 rail border crossings make the rail network within the EL Paso region. The railroads serving the region consist of the UP, BNSF, and Texas Pacific Transportation, which operate the South Orient Railroad owned by the Texas Department of Transportation.





Camrose
Subdivision

Camrose Road

1:200000



INFRASTRUCTURE

Interstates / Highways

Interstates: I-10 Length: 99.5 km

Interstates: I-10 Length: 1.4 km

U.S. Highways: US 54 Length: 32.2 km

U.S. Highways: US 62 Length: 49.7 km

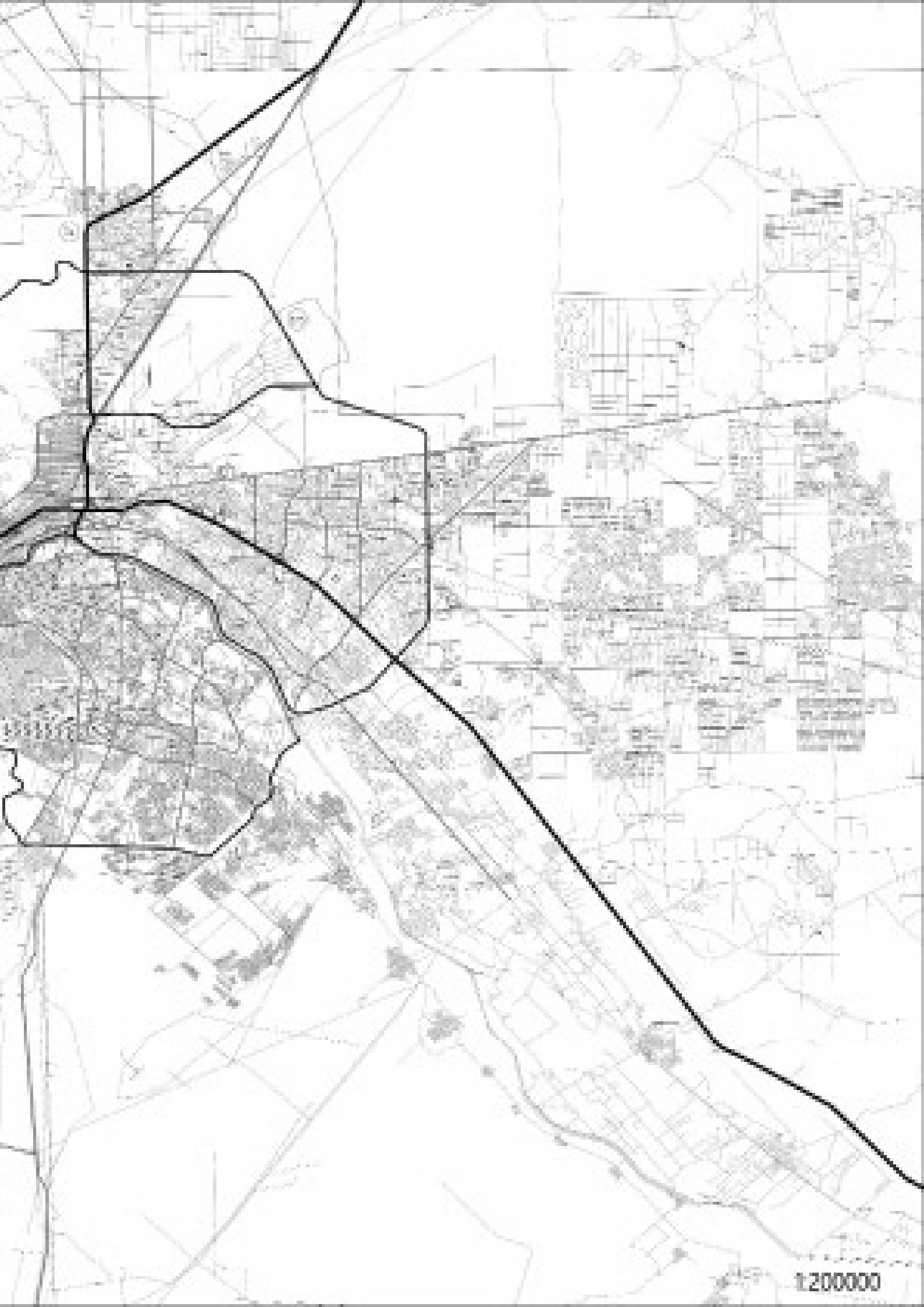
U.S. Highways: US 85 Length: 9.0 km

U.S. Highways: US 180 Length: 49.6 km

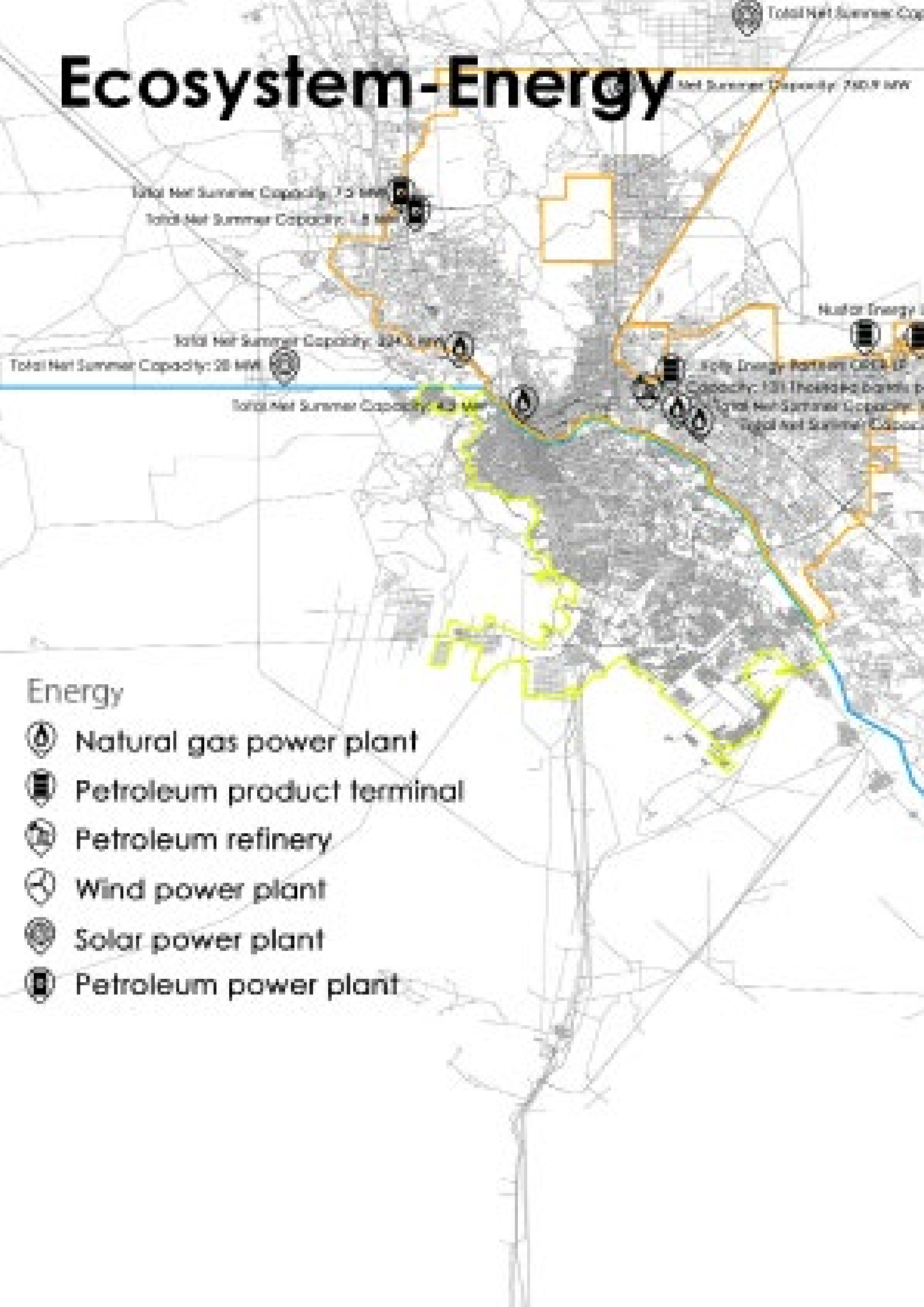
State highways: SH 20 Length: 98.7 km

State highways: SH 178 Length: 4.7 km

State highways Loops: LOOP 375 Length: 79.2 km

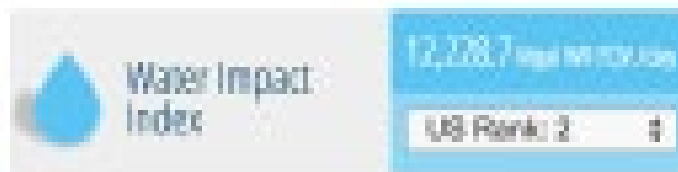


Ecosystem-Energy

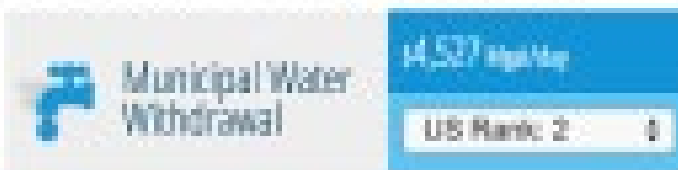


Ecosystem -River Basin

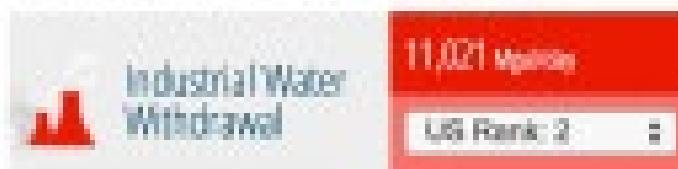
Texas River Basin



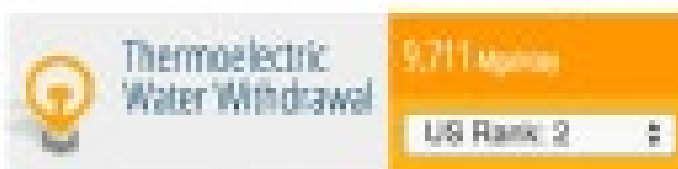
Indicator of water withdrawal incorporating multiple factors (volume, resource stress and water quality) to account for the impact of human activities on water resources.



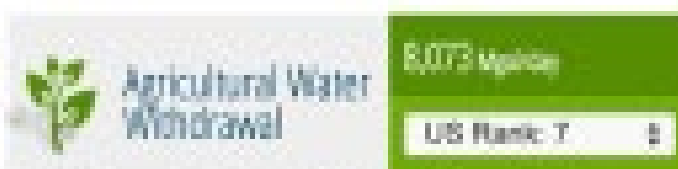
The daily amount of water that is withdrawn by suppliers (domestic, commercial, some industrial, and public water use) that furnish water to at least 25 people.



The daily amount of water withdrawn for purposes of lubrication, processing, washing, and cooling (chemical products, food, paper products, petroleum refining, etc).



The daily amount of water that is withdrawn for the purpose of generating electricity with steam-driven turbine generators.



The daily amount of water that is withdrawn for the purposes of livestock, aquaculture, irrigation uses.

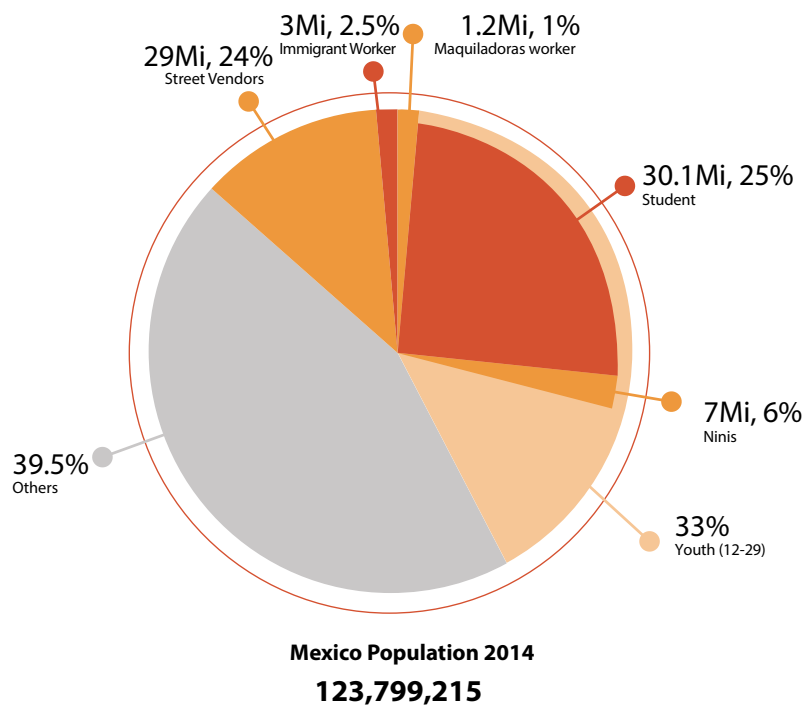


The ratio of depreciation on the total value of non-current assets (non-current assets are the long-term assets, not easily convertible to cash).

Ecosystem Green Space

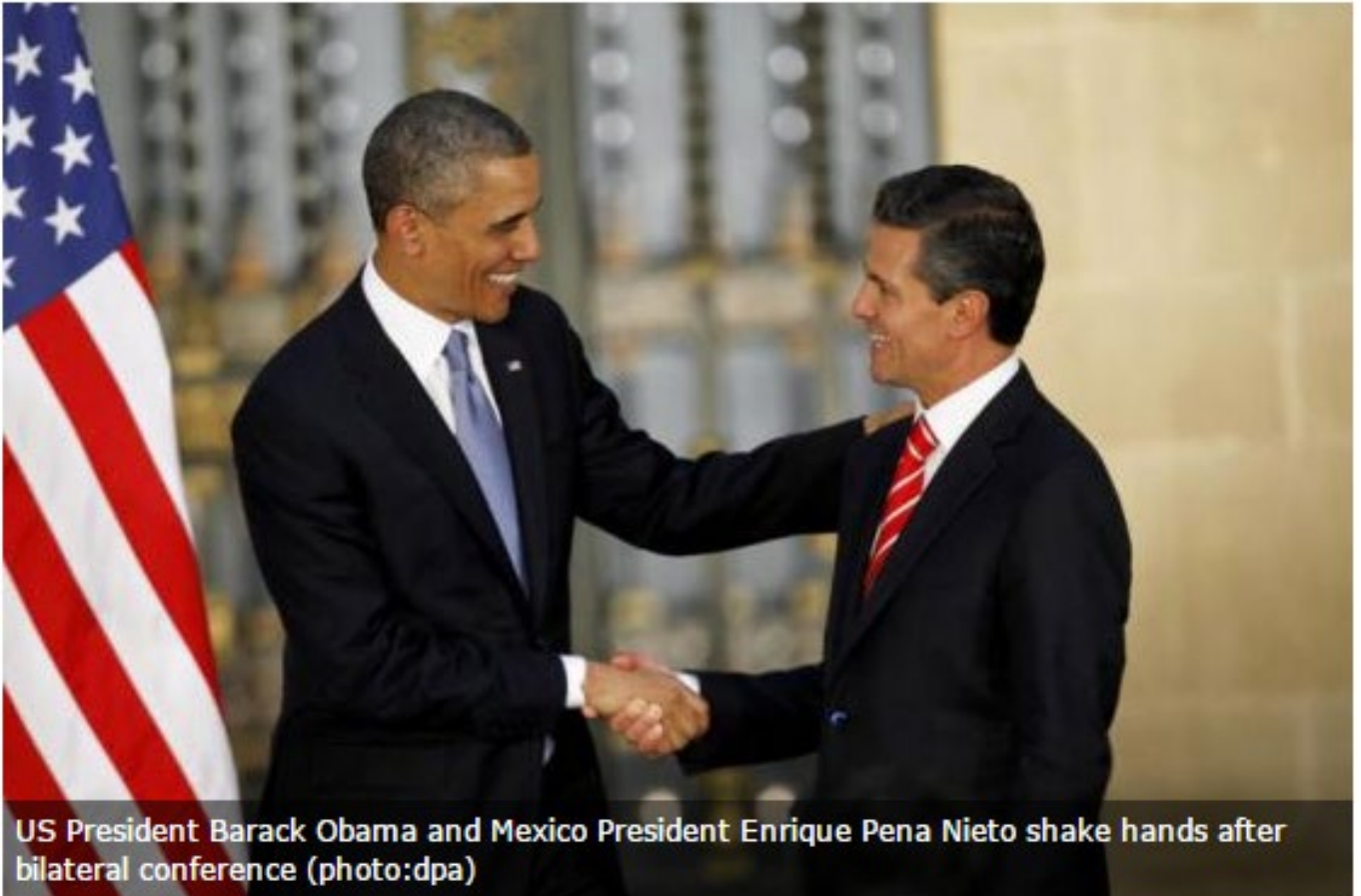


Target Group



Source: CGAP Analysis
Mexico's National Institute of Geographic Statistics and Information (INEGI)
The National Institute of Educational Evaluation report
BBC publishing in 2006 Mexicogulfreporter

Mexico and US take spotlight off drugs and immigration and focus on education

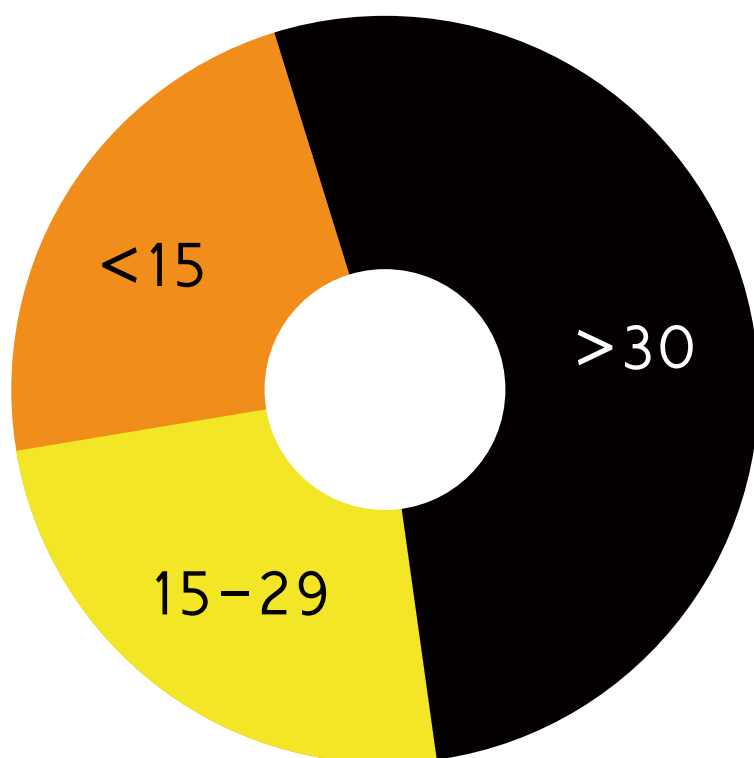


US President Barack Obama and Mexico President Enrique Peña Nieto shake hands after bilateral conference (photo:dpa)

MEXICO has, for decades, failed to put together an adequate fiscal or industrial policy to encourage development in technology and allow Mexican enterprises to become globally competitive.

But a shared initiative with the US aims to upgrade its development of science and technology programmes and see the nation reposition its economy in the world market.

Juárez is a young city: about half of its inhabitants are under the age of 30, and one quarter are between fifteen and 29.



NYC: Mexican youth have highest dropout rate



by [Insideschools staff](#)

font size | [Print](#) | [E-mail](#)

Monday, 29 July 2013 17:33



Susanna, a 19-year-old undocumented Mexican student who nearly dropped out of high school

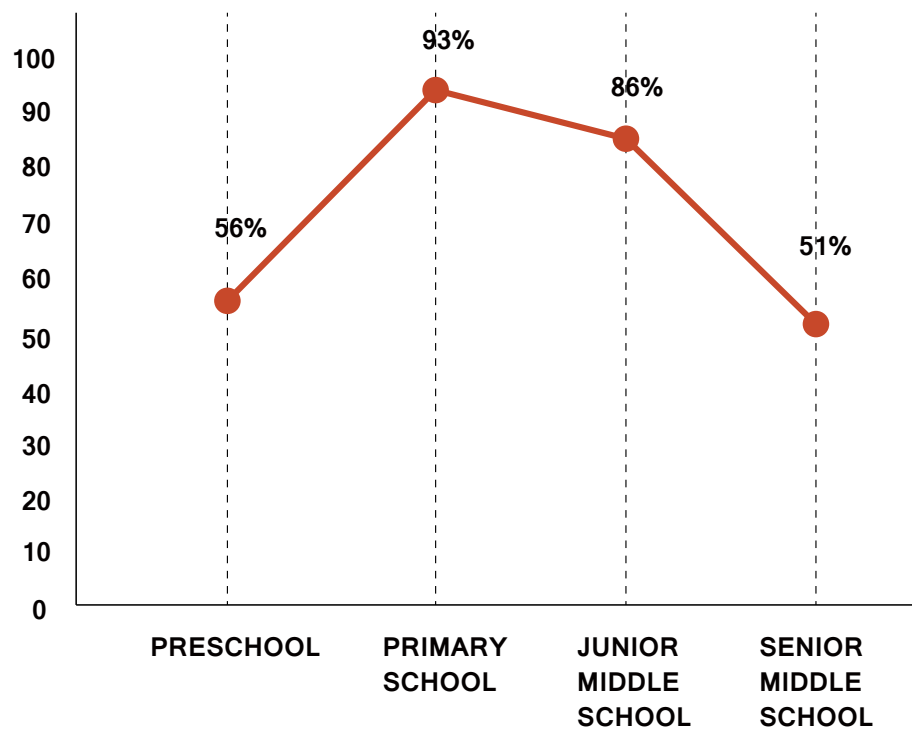
Photo by Fi2W reporter Mica Scofield

Mexicans are both the fastest growing and youngest major ethnic group in New York City, with nearly half under the age of 25. Yet only 37 percent of the city's Mexican population, ages 16-24, are enrolled in school, according to a new report by [Feet in Two Worlds](#), at the New School's Center for New York City Affairs. Foreign-born Mexican-Americans have a particularly high dropout rate, as do young men.

A new podcast explores the high dropout rate among Mexican youth and reports on efforts by schools and community groups to reverse the trend. It finds that poverty and a lack of English language proficiency are major contributing factors. In addition, some undocumented students say they are given erroneous information by school guidance counselors.

HIGH DROP OUT RATE IN MEXICO

MEXICAN ENROLLMENT POPULATION BY LEVEL



Out of Every 100 Students Entering Primary

- 68 complete basic education
- 35 graduate from Upper Secondary

Unemployed Youth Are Fighters, Victims in Mexico Drug War

Written by Geoffrey Ramsey Friday, 31 August 2012

Mexico

f Share
T Tweet
0
in Share
G+ Share



Reports that the number of unemployed youths in Mexico stands at 8 million and is set to rise are bad news for security, as this group makes up the majority of combatants and victims in the country's drug war.

Excelsior published a report saying that there are currently 8 million Mexicans aged 18 to 30 who are not in work or education -- known as "ni-nis" (so labeled because they neither study or work, "ni estudian ni trabajan"). This is equivalent to more than 20 percent of the age group, and is on the rise, according to the newspaper.

FEATURE STORY

Mexican Youth: Authors and Victims of Violence

March 5, 2013

This page in: [English](#) | [Español](#)

✉ 🖨 TWEET f SHARE in SHARE +



World Bank

RELATED

- WORLD BANK
[World Bank - Mexico](#)
- [Study: Youth violence in Mexico \(sp\)](#)
- [Mexico: In Oaxaca, Few Graduate in the Professions That Are Most Needed](#)

[Mexico](#)
[Latin America and Caribbean](#)

LATEST NEWS

PRESS RELEASE
World Bank Regional Vice President Visits Romania, Support to Structural Reforms Continues
Jan 14, 2016

Youth Gang In Juarez

Youth hang out in the Diaz Ordaz colonia, one of the poorest neighborhoods of Ciudad Juarez. The group hangs out on a lookout above the neighborhood to see if outside gangs are coming to attack or rob them, after they had received death threats and a series of violent exchanges between neighborhoods left them nervous.



At right, "El Mongo" and his cousin smoke marijuana outside their home in Ciudad Juarez.



Manny hangs out with his brothers outside his house. Recently their friend Chino was murdered at the inauguration of a new soccer field that was built between three neighborhoods that have a history of violence. The boy in the center of the photograph saw the murder.



Youth Gang In Juarez

in Juarez, 1 out of 3 kids doesn't go to middle school, and attendance in high school is half the national average. A recent study found that 120,000 Juarez youngsters aged 13 to 24 — or 45 percent of the total — are not enrolled in any education or do not have any formal employment.

Parents here often neglect their children, with many broken homes and demanding jobs in assembly plants or in the city's huge sex industry.

Government has also grossly disregarded the slums, failing to provide adequate schools or job opportunities. **They often lacked positive supervision and had little hope for the future.**

Interview Of Youth Gang In Juarez

“You just do it, grab a pistol and go kill somebody, or whatever. It doesn’t matter if you die or not.”

“If you don’t have a mother or a father, no one to believe in you, then it’s easy to fall into this, to be a delinquent.”

“You go with the guys who have the most power, money, connections and influence”

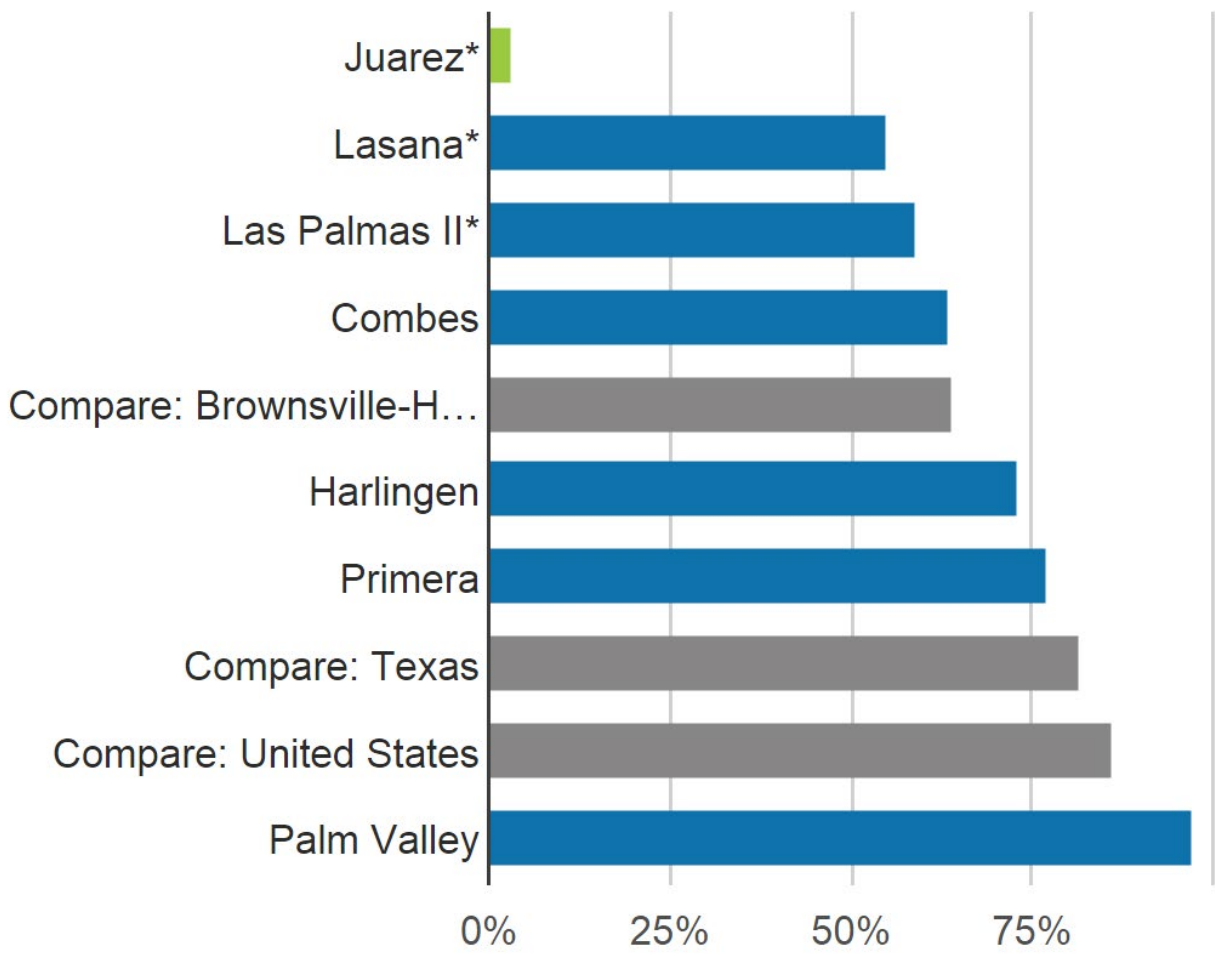
“The gang becomes like your home, your family. You feel part of something,” he said. “And you know the gang will back you up if you are in trouble.”

“They don’t feel anything that they have murdered people. They just don’t understand the pain that they have caused others.”

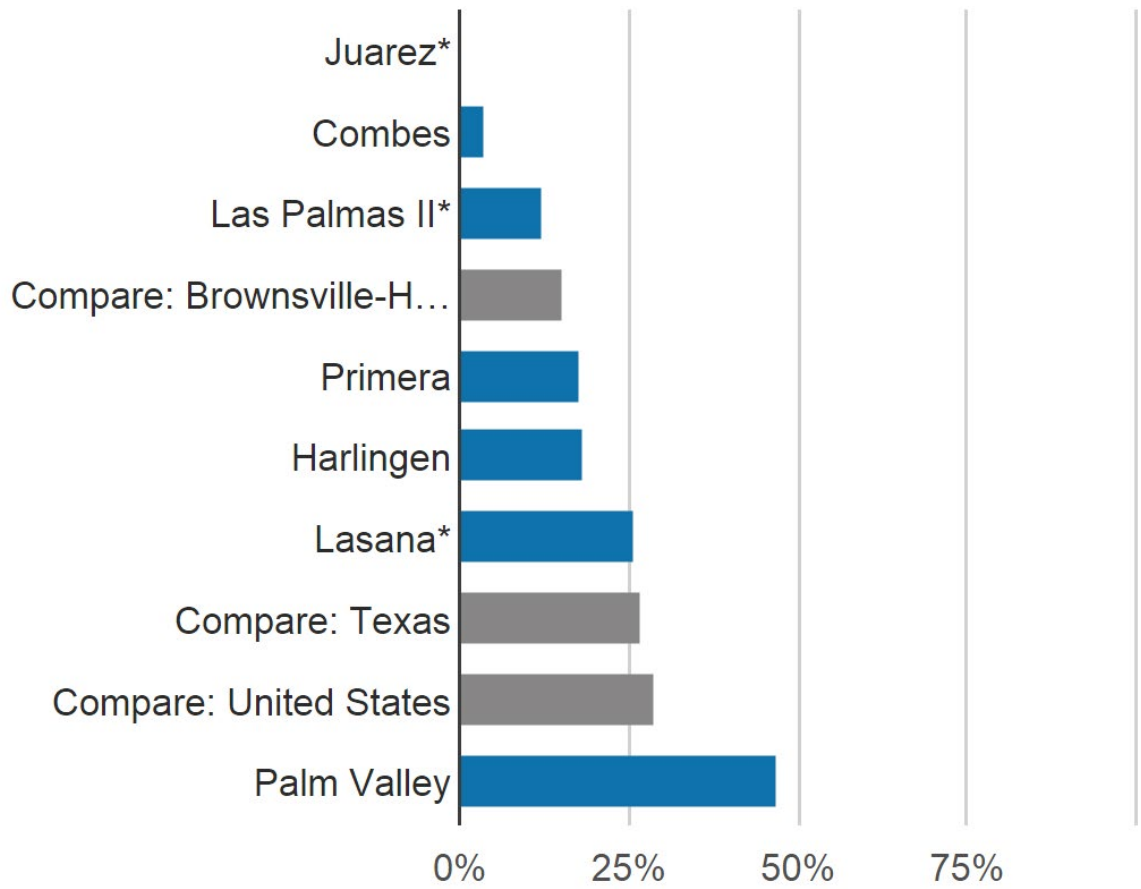
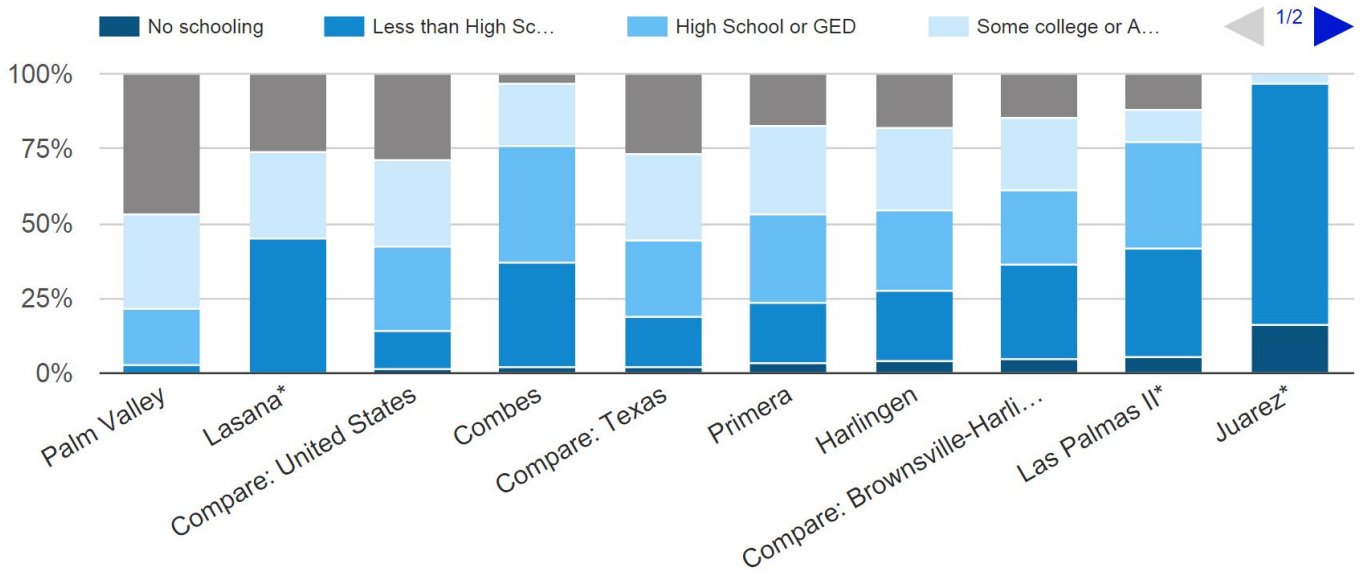
“They only see the day to day. They know they could die and they say so. But they don’t care. Because they have lived this way all their lives.”

Why Youth Join Gangs

- There is no urban space in society that is adapted to their needs, where they can exercise the rights that their families, government, and communities do not offer them. Arising out of extreme poverty, exclusion, and a lack of opportunities, gangs try to gain their rights and meet their needs by organizing themselves without supervision and developing their own rules, and by securing for themselves a territory and a set of symbols that gives meaning to their membership in the group.
- Youth join gangs for protection, enjoyment, respect, money, or because a friend is in a gang.
- Youth are at higher risk of joining a gang if they engage in delinquent behaviors, are aggressive or violent, experience multiple caretaker transitions, have many problems at school, associate with other gang-involved youth, or live in communities where they feel unsafe and where many youth are in trouble.



Juarez, TX Education Attainment by Level Comparison (Age 25+),2014



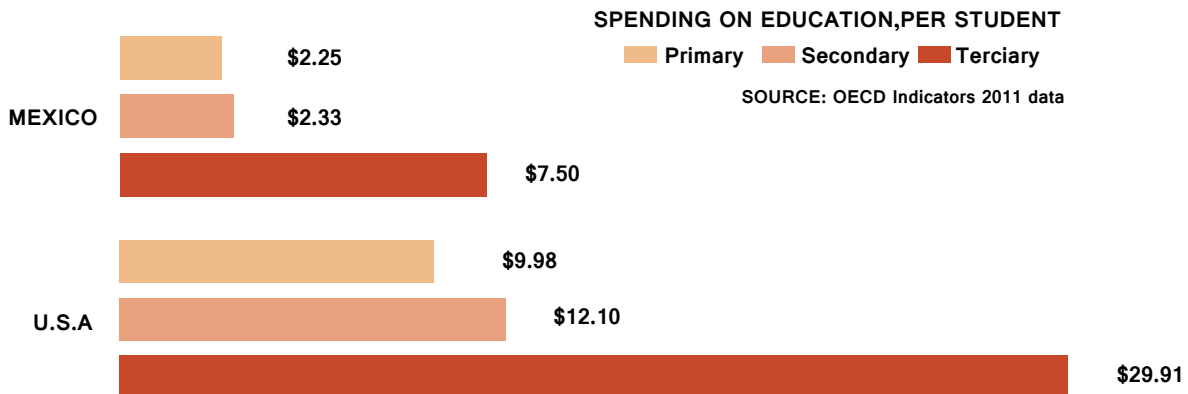
Mexico City schools lack maintenance

📅 6 months ago 👤 ML 📁 Mexico 💬 0

Share this: [f Facebook](#) [🐦 Twitter](#) [g+ Google+](#) [📌 Pinterest](#) [✉ Email to a Friend](#)

Capital city students face overused and outdated facilities daily

LACK OF EDUCATION RESOURCE



Mexico faces some primary problems

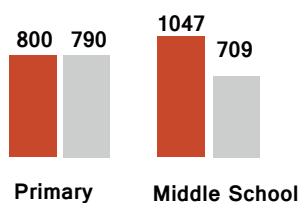
A powerful union, weak teaching and outmoded curricula are hampering progress.

Matt Krupnick reports from Oaxaca

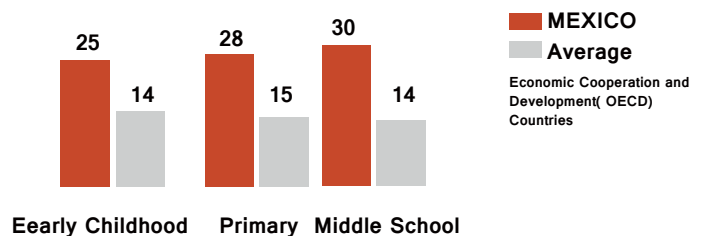
March 28, 2013



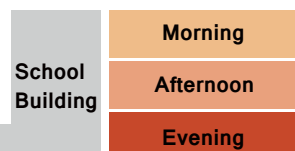
NUMBER OF HOURS OF TEACHING TIME



AVERAGE NUMBER OF STUDENTS FOR EACH TEACHER



HIGH DROPOUT RATES IN LEVELS BEYOND PRIMARY
POOR EDUCATION QUALITY
INSUFFICIENT COVERAGE IN LOWER SECONDARY
INSUFFICIENT SCHOOL BUILDINGS AND CLASSROOMS



Education background

Training helps job seekers achieve dreams

"My dream is to pursue a career in physical therapy. Several years ago, I met the son of a cousin who was born paralyzed, and that inspired me to want to help others."

When financially hard times fell on his family of 10, Cristian Alonso Chávez, from Mexico's Francisco I. Madero neighborhood in Ciudad Juarez, had to leave school to look for work, discontinuing his education after middle school.

Although Chávez, 22, had almost three years of experience as an



With help from USAID training, Cristian Alonso Chávez will now be able to pursue his dream.

USAID Youth: Work Mexico program

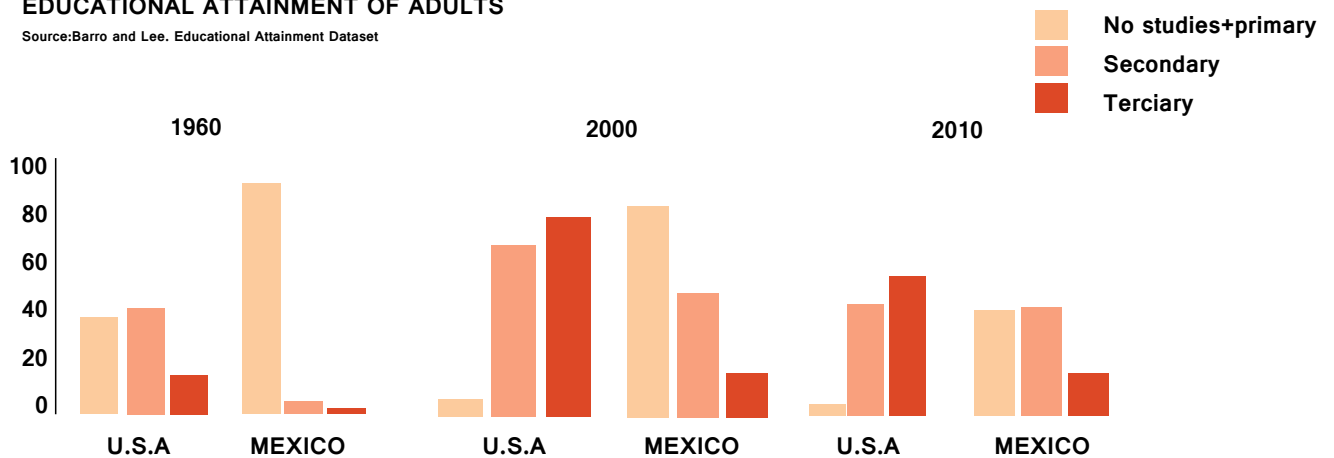
ADULTS WITH A HIGH SCHOOL EDUCATION

Source: OECD indicators 2009



EDUCATIONAL ATTAINMENT OF ADULTS

Source: Barro and Lee, Educational Attainment Dataset



Commuter Student

BBC Sign in News Sport Weather Shop Earth Travel M

NEWS

Home Video World UK Business Tech Science Magazine Entertainment & Arts

Magazine

Mexican children cross Texas border to attend school

By Thomas Sparrow
BBC Mundo, El Paso, Texas

© 31 January 2015 | Magazine



Febe Ara crosses the border every day to study in the US

Febe Ara lives in one country but goes to school in another.

In today's Magazine

This 16-year-old girl begins her day in Ciudad Juarez, in northern Mexico, before crossing one of the most active international borders in order to study in El

Do people still need to 'come out'?

UTEP THE UNIVERSITY OF TEXAS AT EL PASO

UTEP.EDU / STUDENT AFFAIRS / OFFICE OF INTERNATIONAL PROGRAMS / BORDER COMMUTERS

f t

Office of International Programs

HOME FORMS NEW STUDENTS PASE F VISA J VISA WORK HEALTH INSURANCE US PASSPORTS

Border Commuters

Border Commuters & F-3 Visa

The Border Commuter I-20 and F-3 visa is an option for students who are citizens of Mexico and who attend a U.S. institution within 75 miles of the U.S. / Mexico border. Border Commuters may attend full-time or part-time.

Full-time Border Commuters

A student who lives in Ciudad Juarez and attends UTEP on a full-time basis is issued an I-20 for the entire length of their program. This is at least two years if starting a master degree and longer for undergraduates and doctoral students. Full-time border commuter students must be enrolled full-time every semester to maintain their F-3 visa status.

A student may change from a full-time I-20 to a part-time I-20 at any time during a semester, provided classes are still in session. Visit the forms tab at the top of this page for the Border Commuter I-20 Request.

Part-Time Border Commuters



Existing Education Program

Moreover, no programs have been developed specifically to prevent gangs from emerging. In the meantime, to prevent youth from joining gangs, communities must employ multiple strategies and services, including:

- Addressing elevated risk factors for joining a gang.
- Strengthening families.
- Reducing youth's conflicts.
- Improving community-level supervision of youth.
- Increasing adult supervision of students in and after school.
- Ensuring that punitive sanctions target delinquent gang behaviors, not gang apparel, signs, and symbols.
- Providing tutoring for students who are performing poorly in school.

Existing Education Program



Juarez: Youth Symphony Orchestra Brings Hope to a Rebuilding City

-“Music is now my passion. It helps me relieve and liberate myself from the bad reality of the city, of the violence”, said Ruiseco, a clarinet player who has been with the orchestra for three years ago.

-The Juárez youth orchestra keeps teenagers like Ruiseco, from being interested in drugs and criminal activity. “It also gives them self-confidence and courage to be somebody,”

-“The orchestra gives a message that it is not necessary to live in Juárez without doing bad things,” González said. “It demonstrates the good face of Juárez.”



Todos Somos Juárez——2010

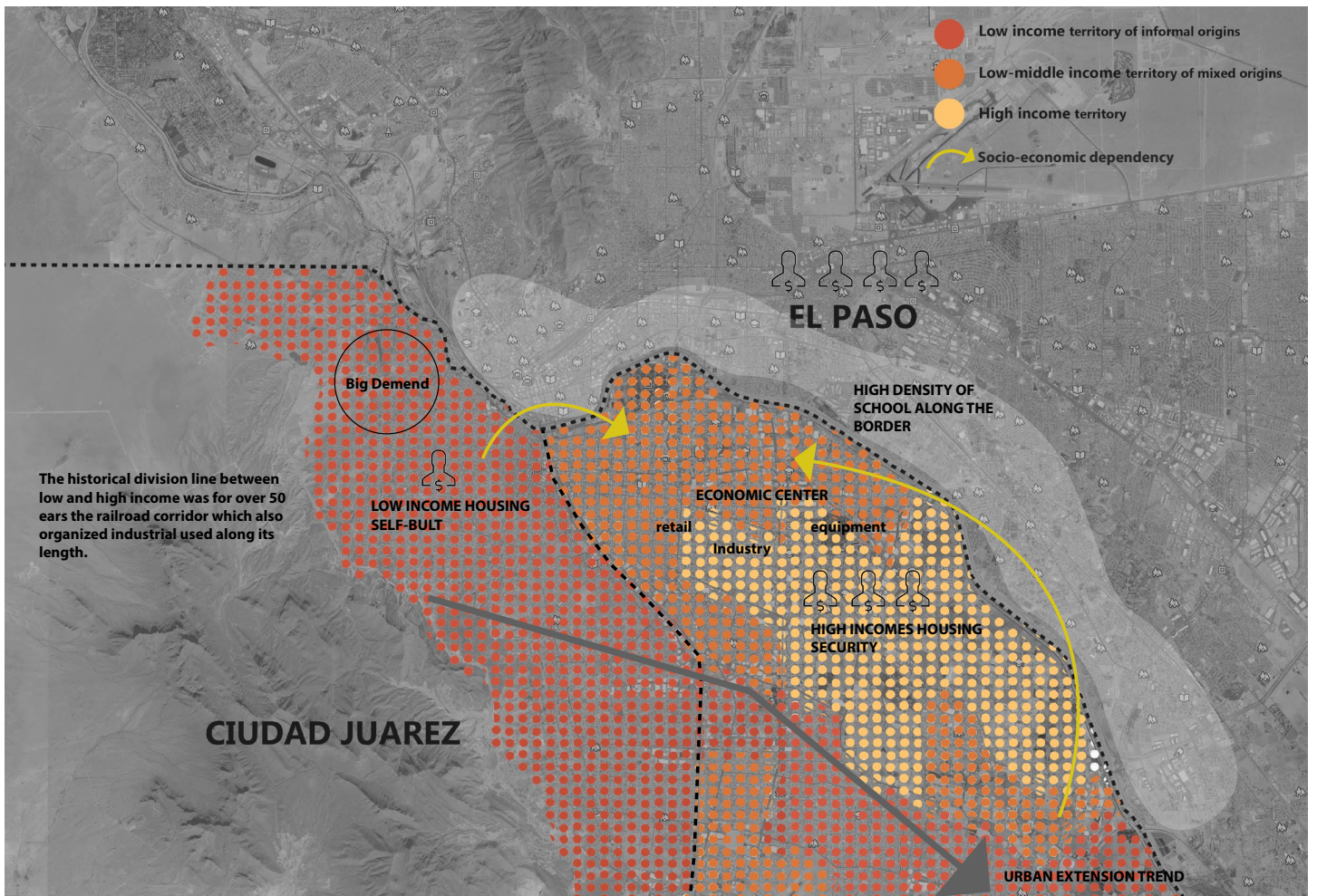
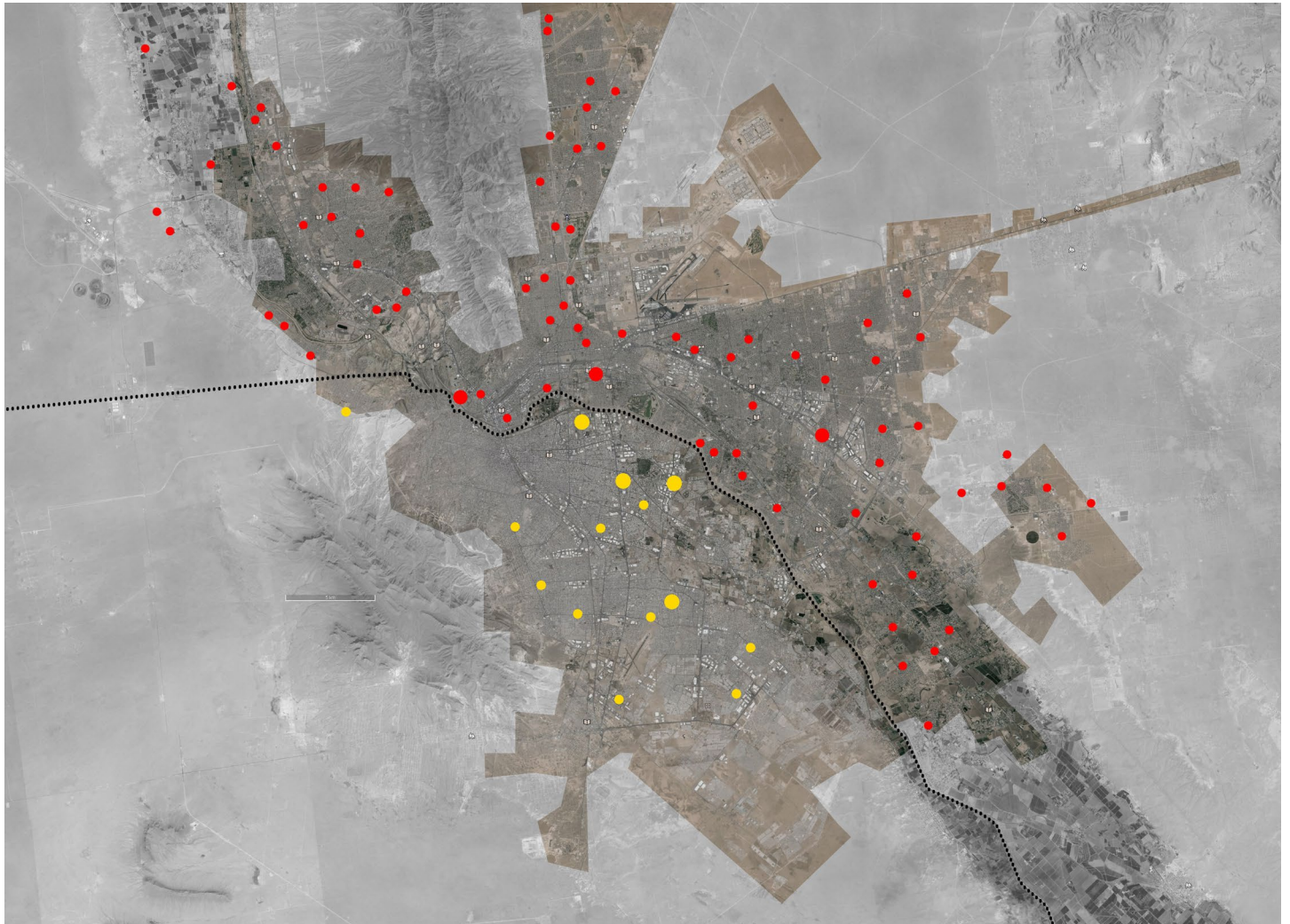
Todos Somos Juárez is an example of an overarching government and civil society partnership in Mexico that can bring together societal support for youth gang prevention programs.

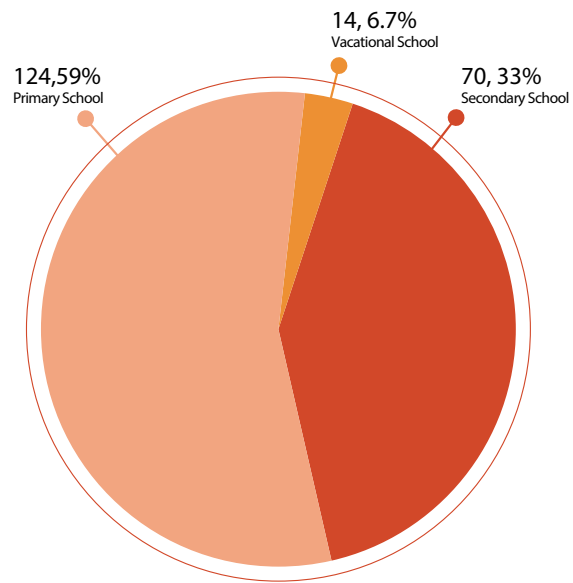
It included state and local government representatives and invited the public to participate in 15 open workshops on a range of topics. It also institutionalized “tables” where local citizens could participate, provide feedback, and identify issues of contention. Human rights activists have criticized these tables because the government generally controls them, steering funding toward high-profile infrastructure projects, thus limiting the real impact citizen participa-

Work Mexico Program

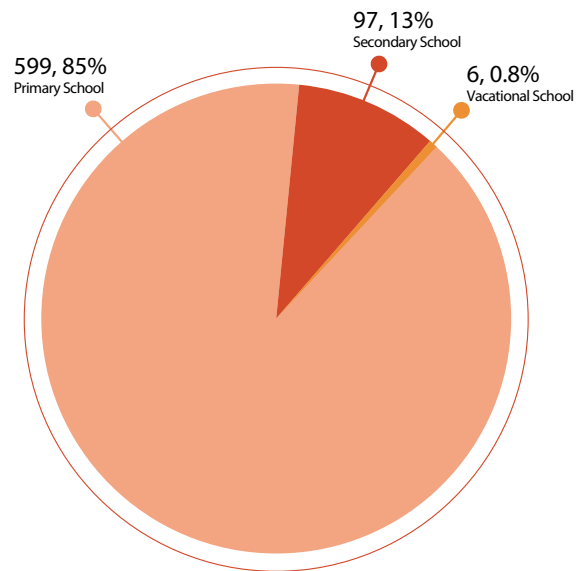
Together with USAID, in 2010 we launched a four-year program called Youth:Work Mexico to address challenges youth face in Ciudad Juarez and Tijuana, some of the country’s most violent and crime-ridden communities. Working with local civil society groups, we’ve helped create safe spaces for disadvantaged young people, strengthened and expanded after-school and summer programs, and prepared Mexican youth for viable futures through formal jobs and self-employment. By welcoming 7,500 young people into youth-friendly summer and after-school

School Distribution

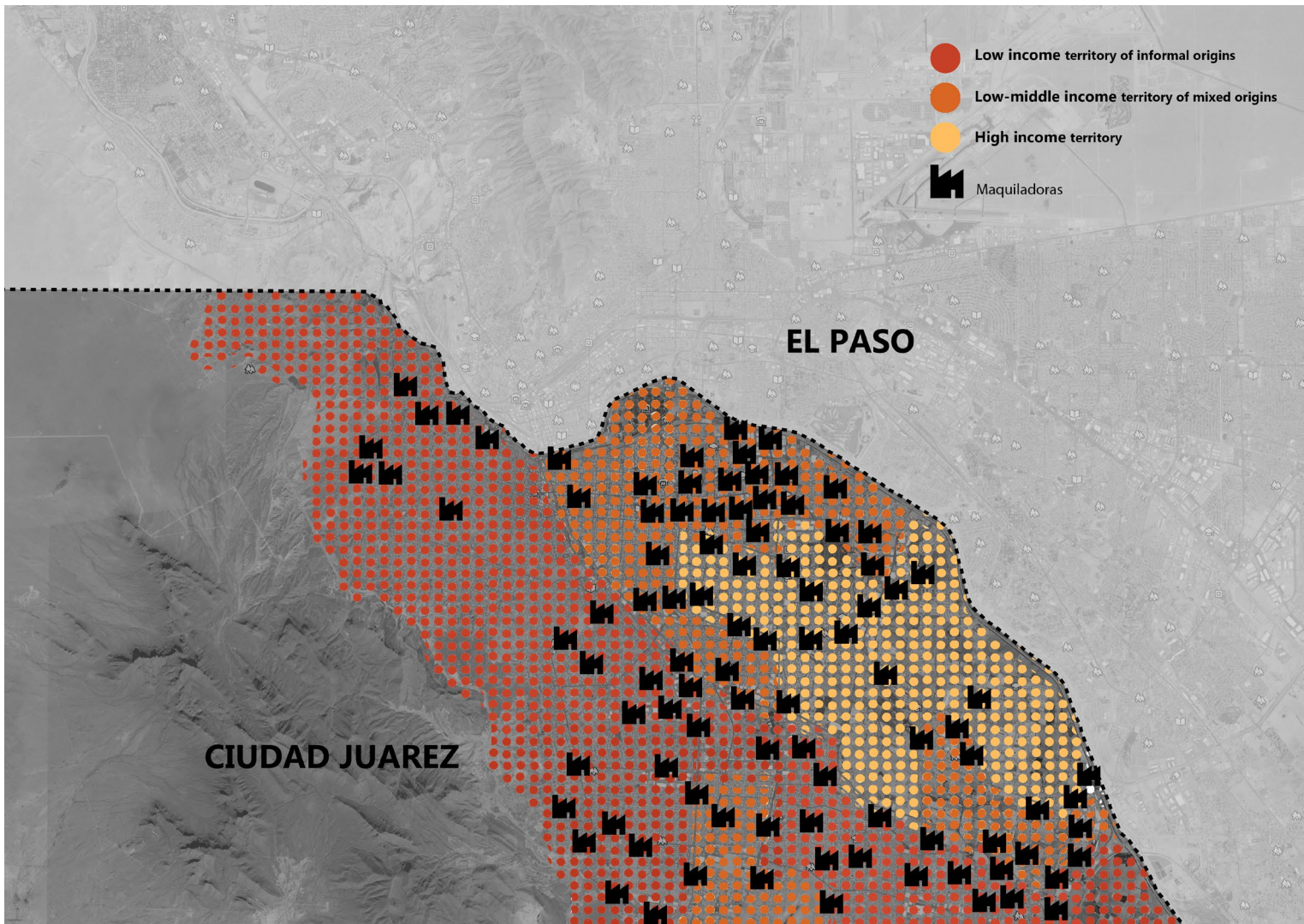




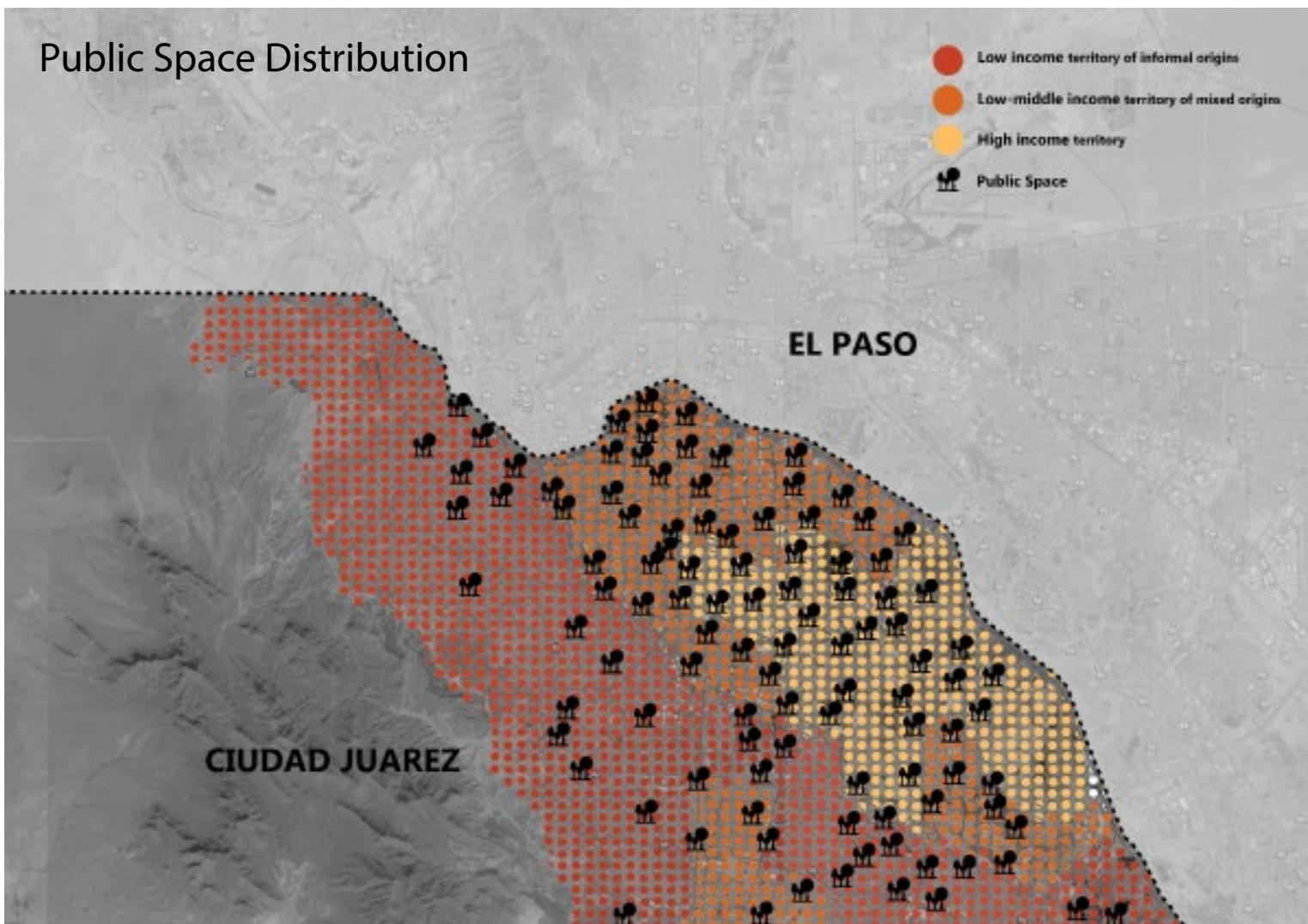
Total Primary School and Secondary School (Public)
EL PASO **208**



Total Primary School and Secondary School (Public)
Juarez **702**



Public Space Distribution



Trip Story



Trip Story



Trip Story

Public Infrastructure in Juarez & Tijuana



Trip Story

Adult Education in Tijuana and China

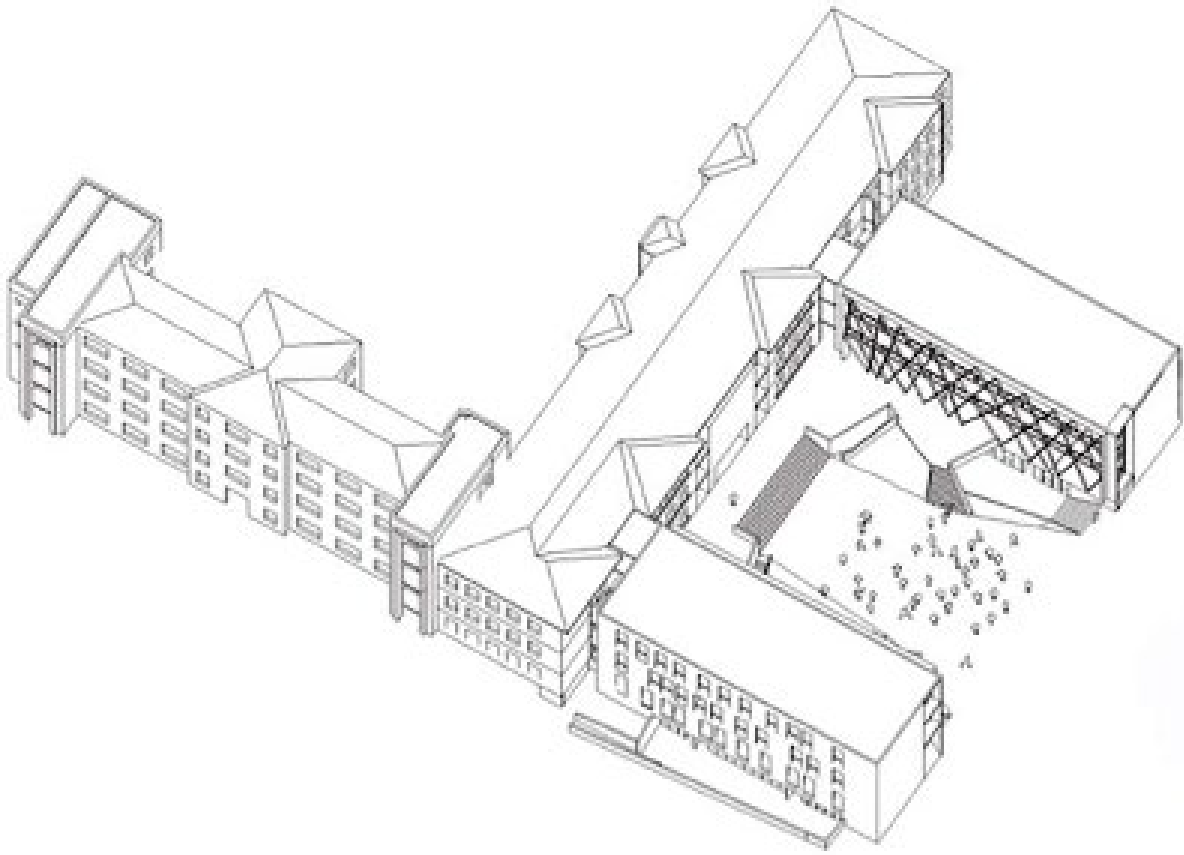


Modern Material & Traditional Material



Study Case

Las Nieves Technical Vocational School



Esquema Isométrico General



Study Case

Project: Gennevilliers Training Center

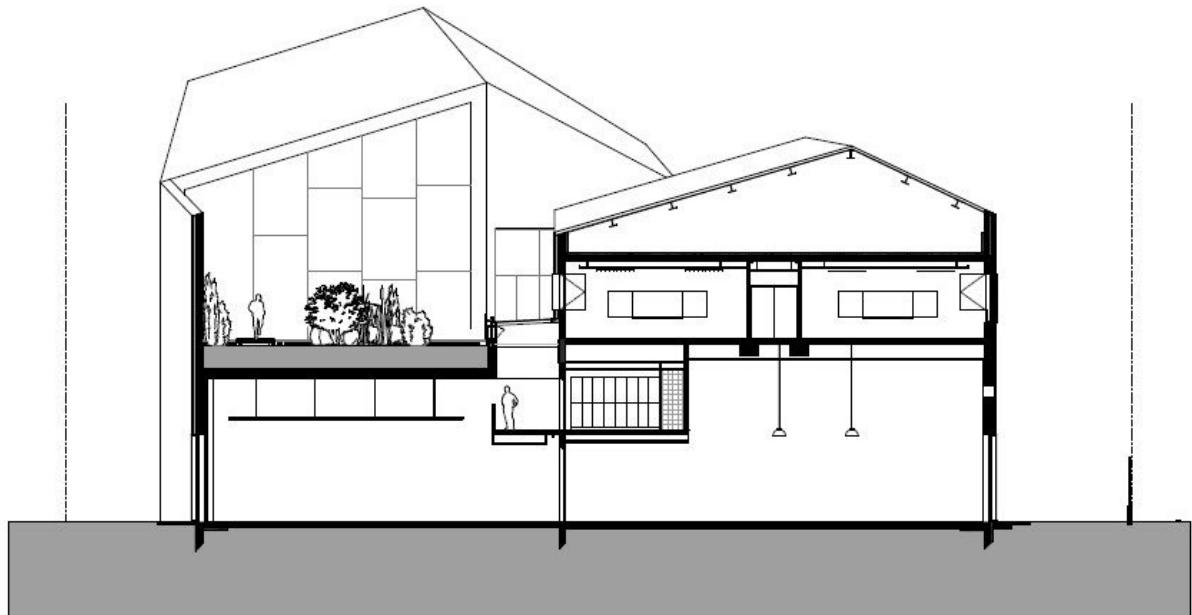
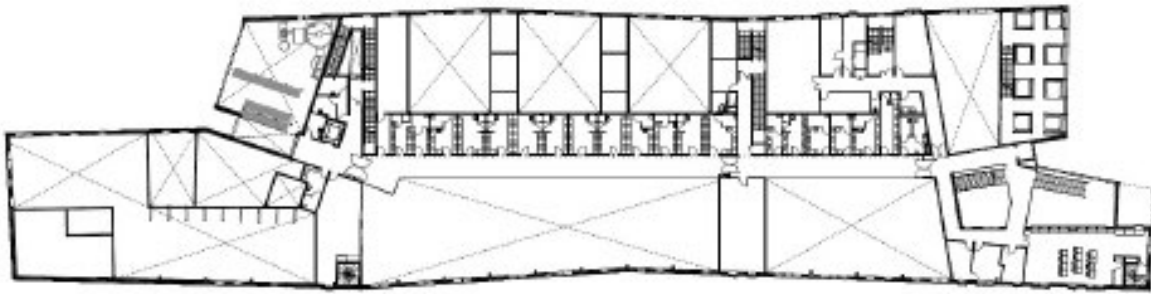
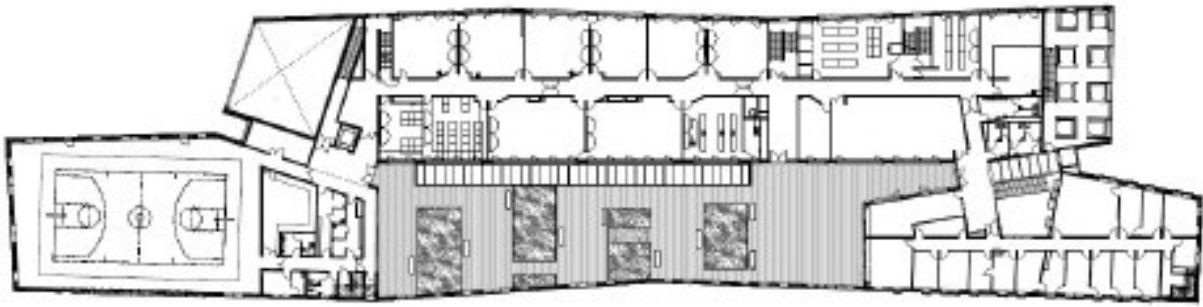
Location: Gennevilliers, France

Area: 7820 sqm

Year: 2012



Study Case



Schools as Community Centers



School with Local Boys and Girls Club which also serves neighborhoods who don't go to school in the same building.

offer facilities and programs outside regular school hours

JOINING WITH CITY

city and district Jointly Designed project

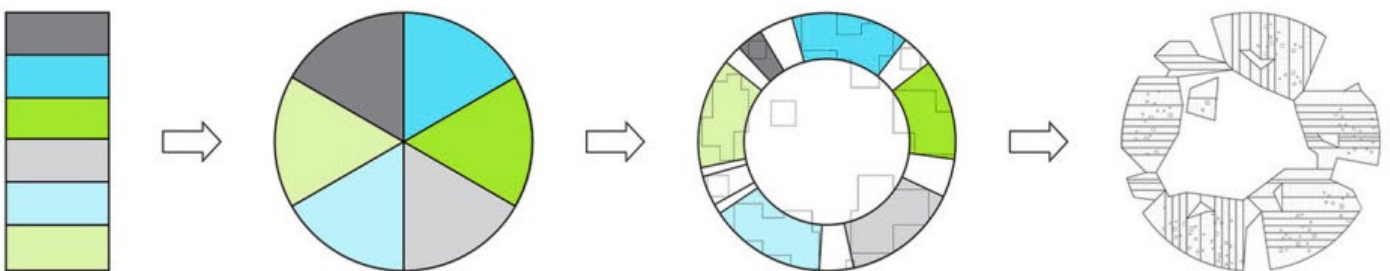
Sharing facilities with community

Track-out Schedule.

Smart School Meadow, Russia

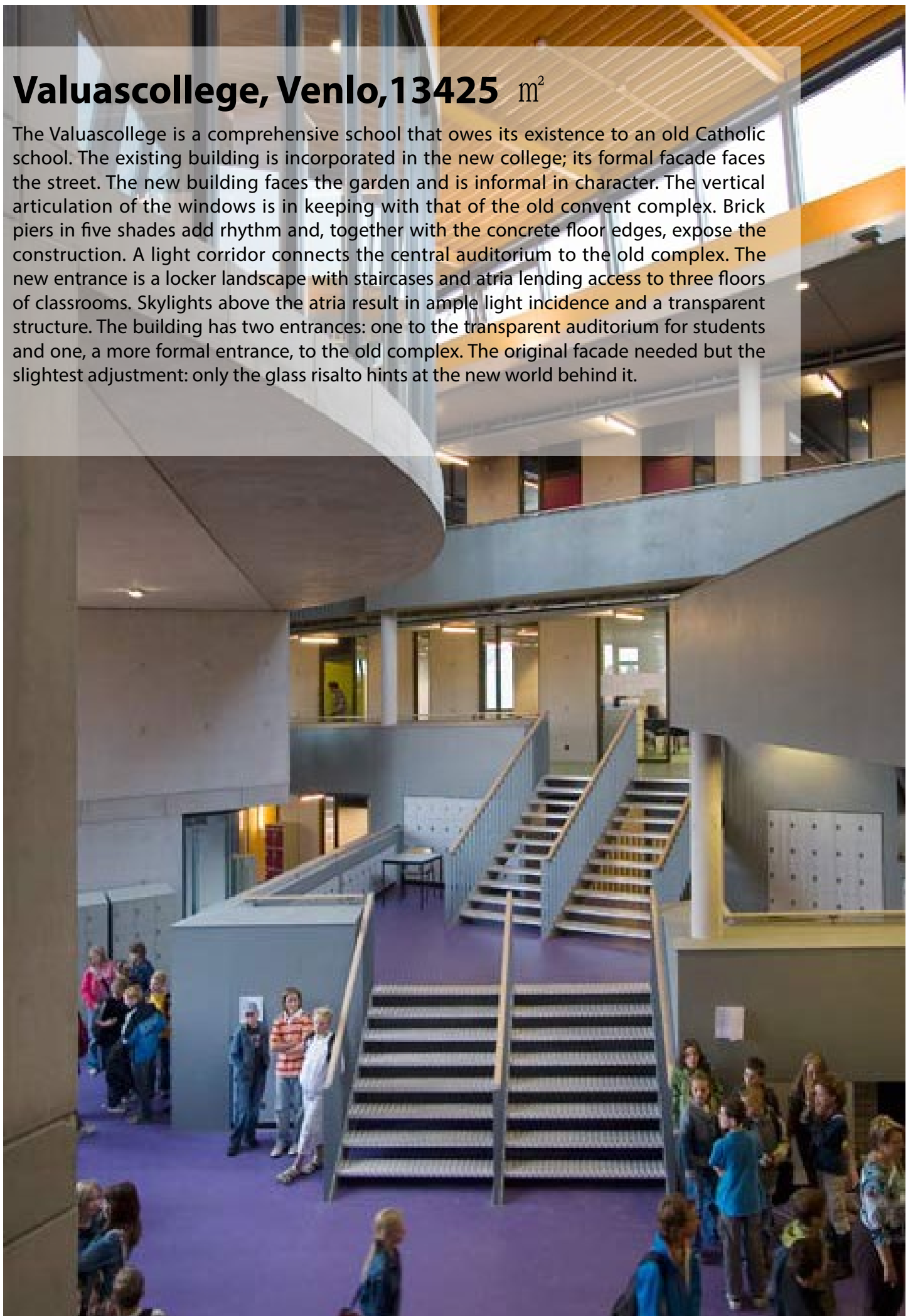


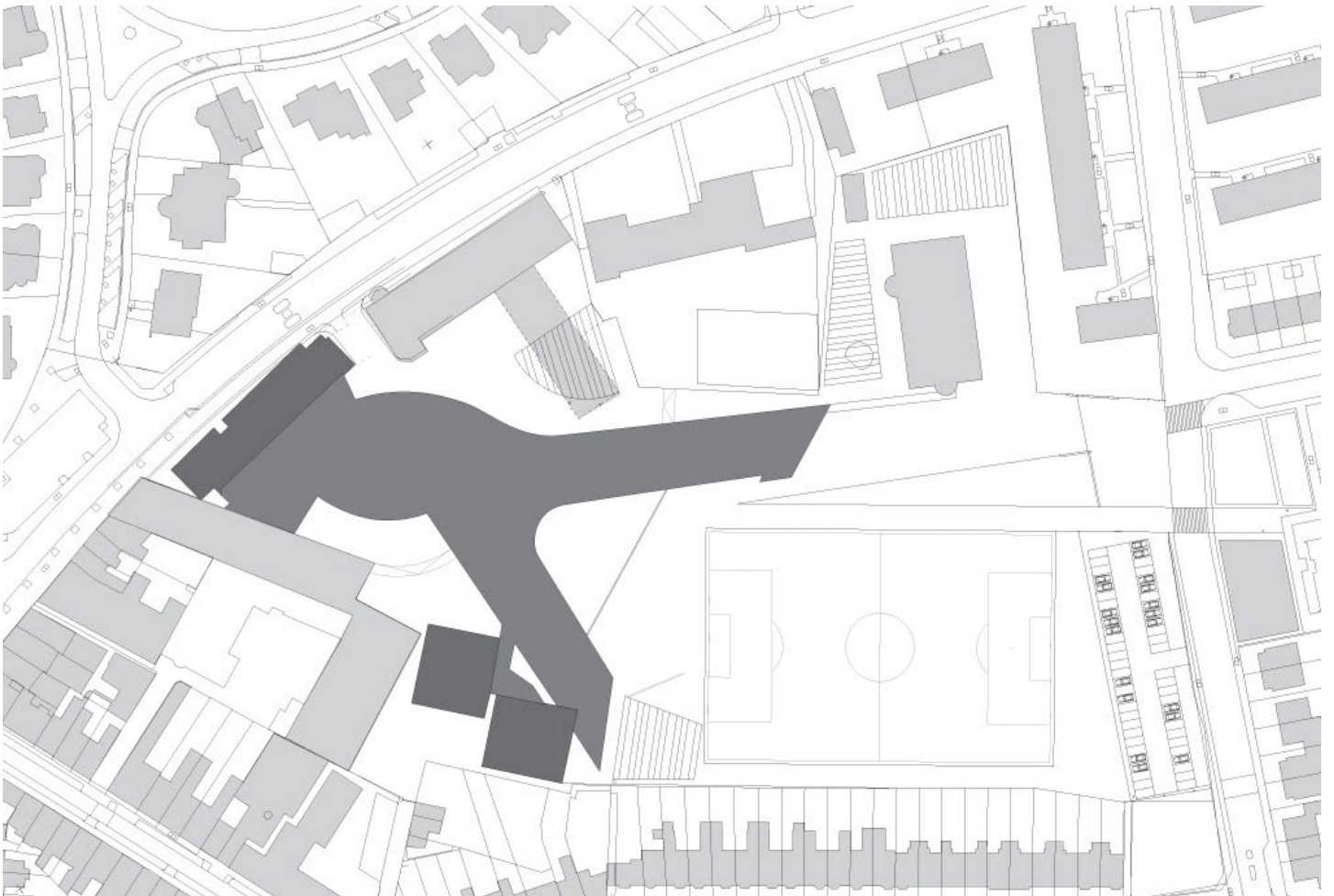
CEBRA's winning competition proposal for a school in Russia doubles as a local community center and draws the surrounding landscape into the complex, unified under a large ridged rooftop. The Danish architecture firm designed the project, dubbed Smart School Meadow, to create a new type of school which would incorporate landscape into the learning environment and provide multifunctional, semi-covered spaces for the local inhabitants. These spaces will include accommodations for disabled and



Valuascollege, Venlo, 13425 m²

The Valuascollege is a comprehensive school that owes its existence to an old Catholic school. The existing building is incorporated in the new college; its formal facade faces the street. The new building faces the garden and is informal in character. The vertical articulation of the windows is in keeping with that of the old convent complex. Brick piers in five shades add rhythm and, together with the concrete floor edges, expose the construction. A light corridor connects the central auditorium to the old complex. The new entrance is a locker landscape with staircases and atria lending access to three floors of classrooms. Skylights above the atria result in ample light incidence and a transparent structure. The building has two entrances: one to the transparent auditorium for students and one, a more formal entrance, to the old complex. The original facade needed but the slightest adjustment: only the glass risalto hints at the new world behind it.





The School of Athens, 1510
Raffaello Sanzio





CHARACTERISTIC OF A GOOD SCHOOL

intermediate level introduced

A Common Core

Flexibility

better granularity
roomsize

sophisticate time management

Clustering

Connectivity

informal meeting place/melting pot

space divide up into hierarchy clusters

different arrangement

node in wider learning network

School Design in the Decades

Safety, Permanence and Endurance 1870s-1920s



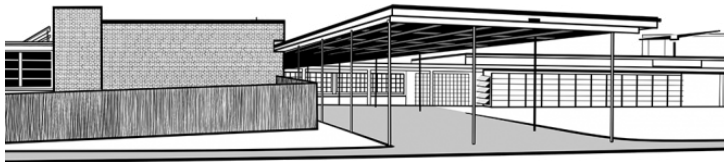
Wiley Elementary School, Raleigh, North Carolina, 1924
Feature Statel Neoclassical Facades and Standardised, multiple rows of desks

The Progressive Era 1930-1945



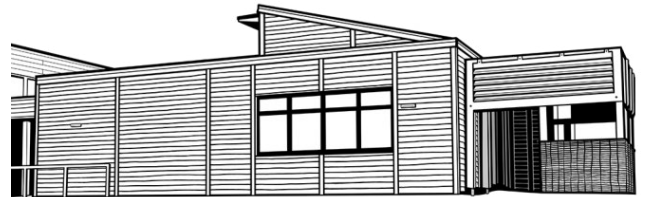
Open Air School , by Johannes Duiker, Amsterdam, 1930
Emphasised on the fresh air, daylight, outdoor learning, and easy flow through the structure that might aid student's physical health and mental wellbeing

Post-war boom 1945-1960



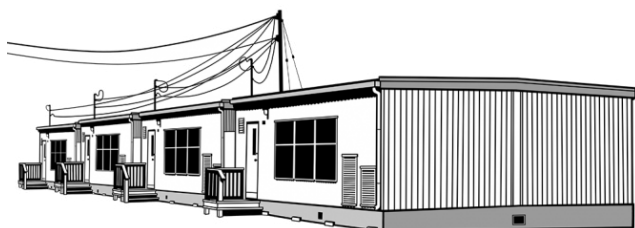
McDonogh 39 Elementary School, New Orleans, 1952

The "Impulsive" Period 1960-1980



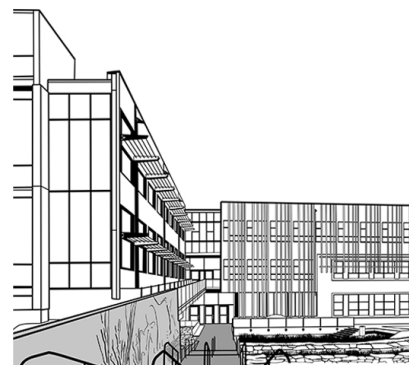
Winkleigh Primary School, Devon, 1970s
Emphasised on prefabrication techniques, increasing reliance for large window and natural ventilation. Open Plan classrooms, lacked windows and suffered from poor acoustics

Declines of 1980s



Portable Classrooms at Pierre Elliott Trudeau High School, Ontario, Canada
Emphasis more modest investment and traditional features, begun to note the state of disrepair affecting the nation's schools.

New Movement of 1990s and 2000s



Sidwell Friends School, Middle School Building, Washington
emphasis on environmentally friendly buildings that also improved indoor air quality

TPOLOGY QUARTERLY

Classrooms have traditionally been built to respond to an approach to teaching that saw a teacher with a designated class teaching from the front of the room. A number of these individual spaces were served by a central corridor.



Traditional school plan
separate box shaped
classrooms opening
off long corridors



Large, open
undifferentiated
space



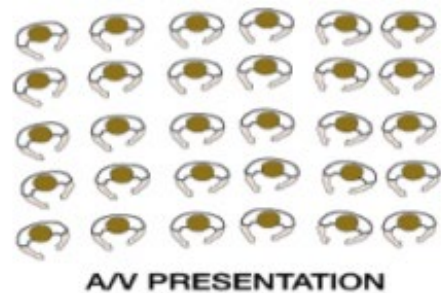
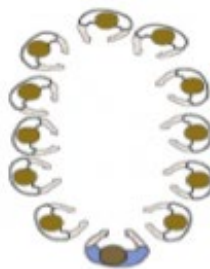
Classroom spaces
linked to shared
communal space



Multi-option space
made up of many
diverse, discrete but
connected spaces

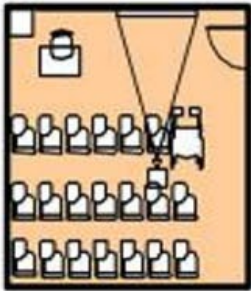
Class/Workshop Type

This works well for class/workshop type instruction but lacks adaptability for use for other learning settings, as shown below. It also results in large, dedicated circulations spaces which might otherwise be incorporated into more space for learning.



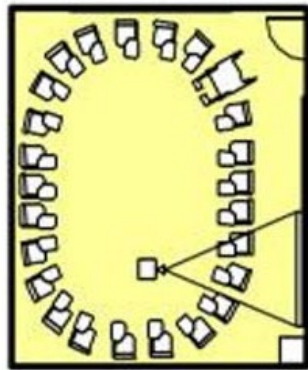
ROOM CAPACITY

Lecture Room



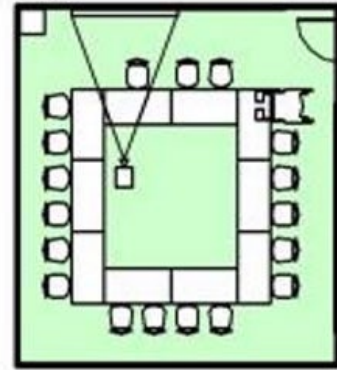
20 Seats
32 Square Meters
1.6 m²/ Seats

Discussion Room



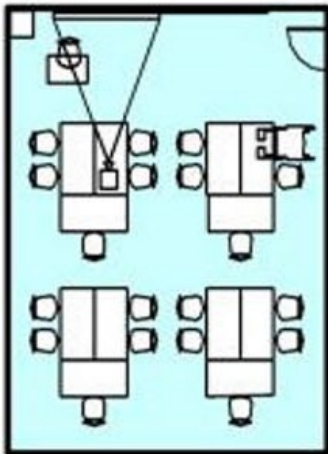
25 Seats
46 Square Meters
1.6 m²/ Seats

Seminar Room



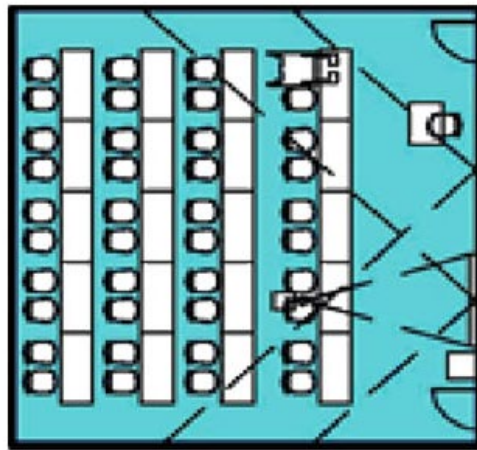
20 Seats
55 Square Meters
1.6 m²/ Seats

Group Work Room



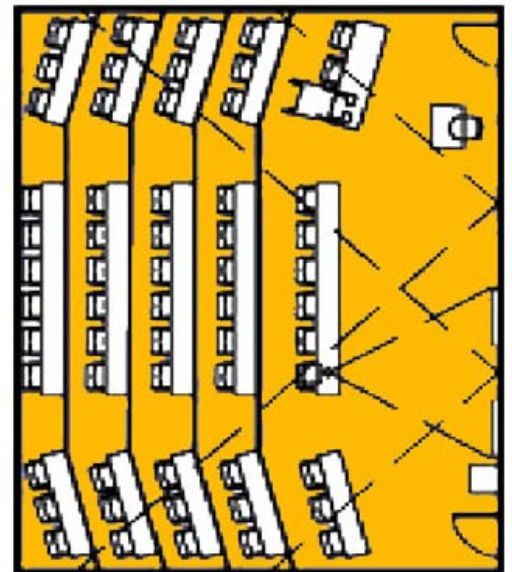
20 Seats
70 Square Meters
1.6 m²/ Seats

Large Lecture Room



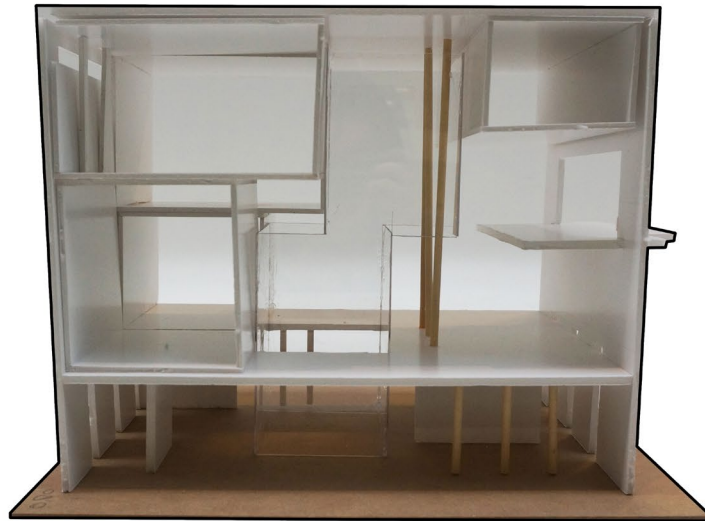
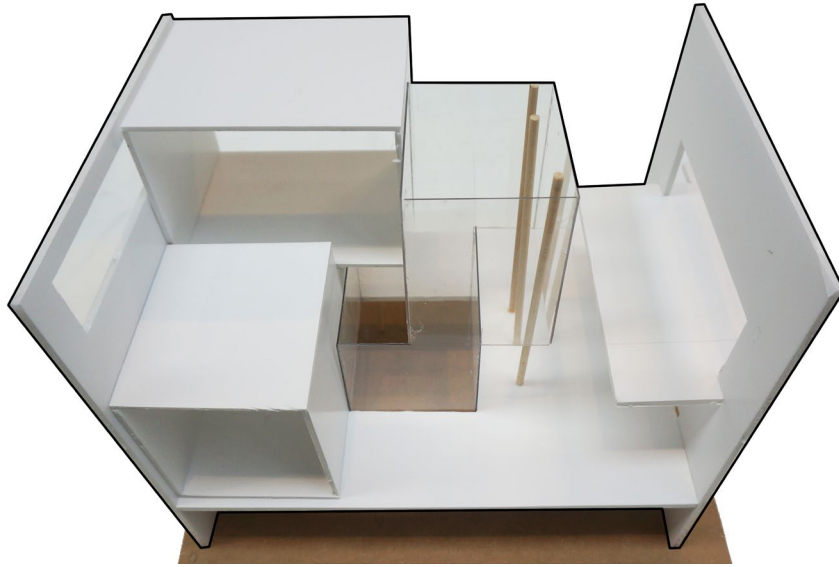
40 Seats
83 Square Meters
1.6 m²/ Seats

Large Lecture Room



60 Seats
111 Square Meters
1.6 m²/ Seats

Interior Spatial Working Model



Difference between USA and Mexico

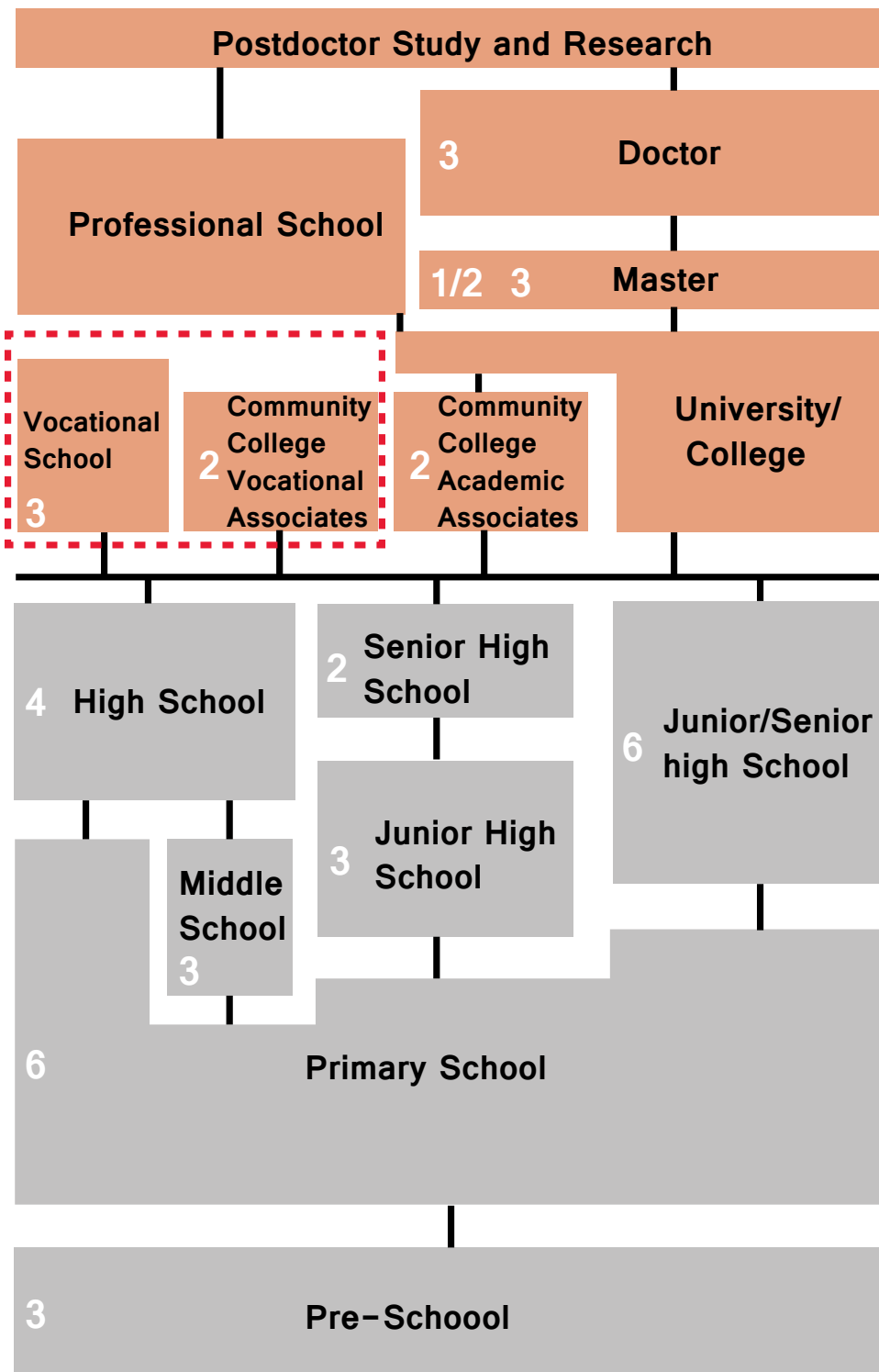
	Mexico School	USA School	Conclusion
Behavior	<p>Student Stay, Teacher Change Classroom</p> <p>Informal Classroom Life, student interaction and movement</p> <p>Tests Make of the Majority of the Grade</p> <p>No Posters on the Walls, Pretty Much Blank</p> <p>Uniform Wearing</p> <p>are Expected to Show Respect to Teacher</p>	<p>Teacher Stay, Student Change Classroom</p> <p>formal Classroom Life, More Rule -Driven</p> <p>Classwork Make the Majority of the Grade</p> <p>Cover Walls and Available Space with Posters</p> <p>Uniform not necessary</p> <p>Equality and Friendship</p>	<p>Classroom Number Difference</p> <p>Dressroom Demands</p> <p>Circulation Difference</p>
Schedule	<p>Having Snack at about 11:00 a.m, heavy meal at home between 1.00pm-2.00pm</p> <p>More free compare to US</p> <p>Morning and Evening School Sessions</p>	<p>12:00 pm -7:30 pm Lunch in Cafeteria</p> <p>Tightly Scheduled</p> <p>Morning Sessions</p>	<p>One Room for Different Session Use</p>
System	<p>5-3-4 education structure</p> <p>Bilingual Education</p> <p>French and Spanish Educational System</p> <p>General and Conceptual Knowledge Teaching</p>	<p>6-3-3 education structure</p> <p>English Speaking</p> <p>British Educational System</p> <p>Concrete and Practical Education</p>	
Facility	<p>Food Shops, May Have Cafeteria</p> <p>Lack of Computer and Internet</p> <p>Students are Accustomed to Seeing and Producing art.</p> <p>Class Size of 30 pupils</p>	<p>School Offer Lunch, Cafeteria Culture</p> <p>Computer and Internet Widely Used</p> <p>Class Size of 25 pupils</p>	<p>Function Difference</p> <p>Classroom Size Difference</p>

Common Activity



Education Systems

U.S.A Education System



Tertiary Education

12
Secondary Education

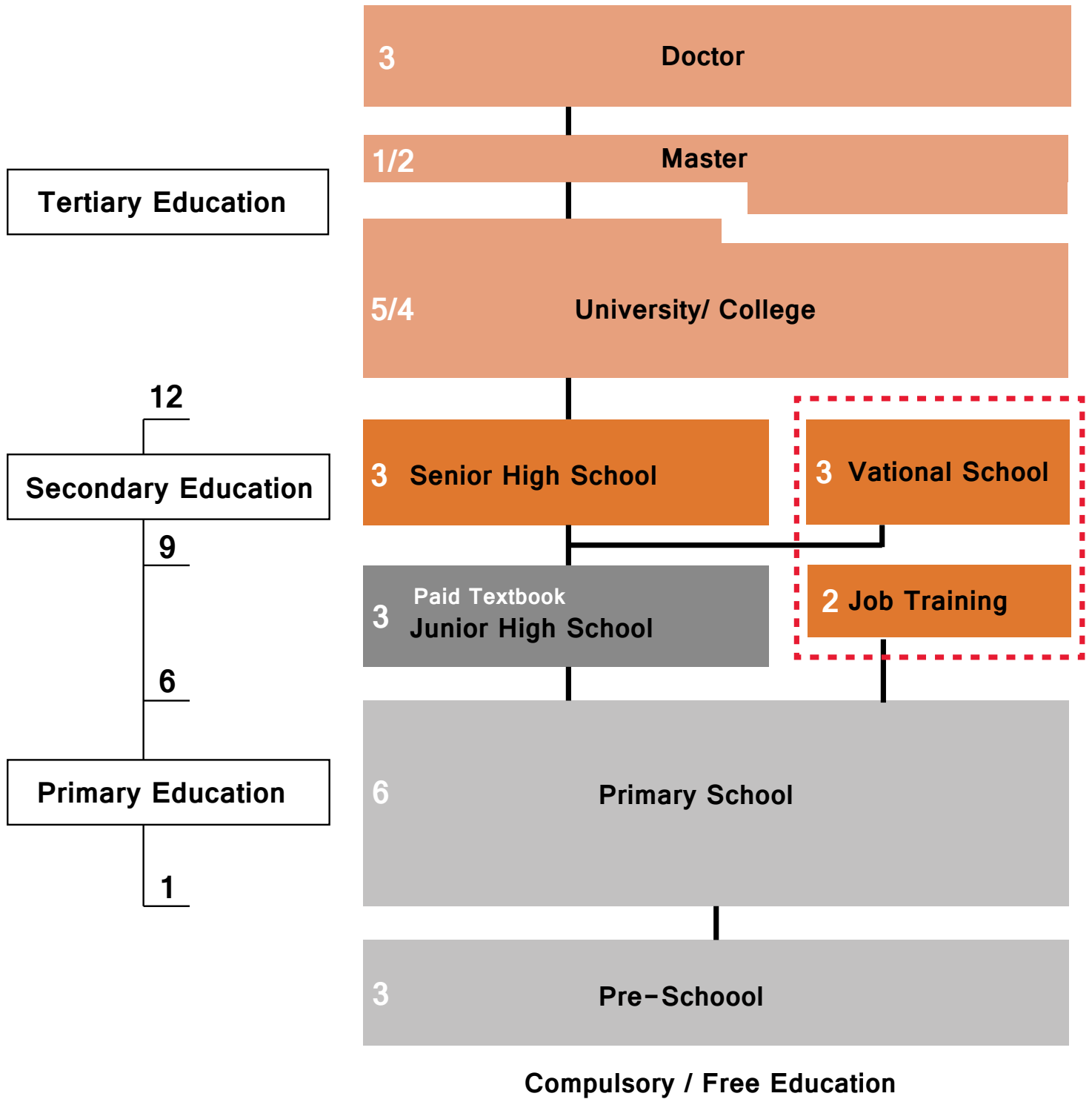
9
6
Primary Education

1

Compulsory / Free Education

Education Systems

Mexico Education System



Difference between USA and Mexico Student

student change classroom



teacher change classroom



Difference between USA and Mexico Student

computer widely used



lack computer



Difference between USA and Mexico Student

canteen culture: 12am



snack: 11am



Difference between USA and Mexico Student

no uniform required



uniform required



Difference between USA and Mexico Student

poster in corridor



poster forbidden

