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# A Partnership to Dismantle a School-to-Prison Pipeline in South Texas

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# UTRGV's Role: make a direct impact in regional poverty and low health through education for sustainable development.




UTRGV is a multi-campus, Hispanic Serving Institution.

- ✓ 27,809 students enrolled (2017)
- ✓ AASHE STAR Gold Rating
- ✓ UTRGV School of Medicine





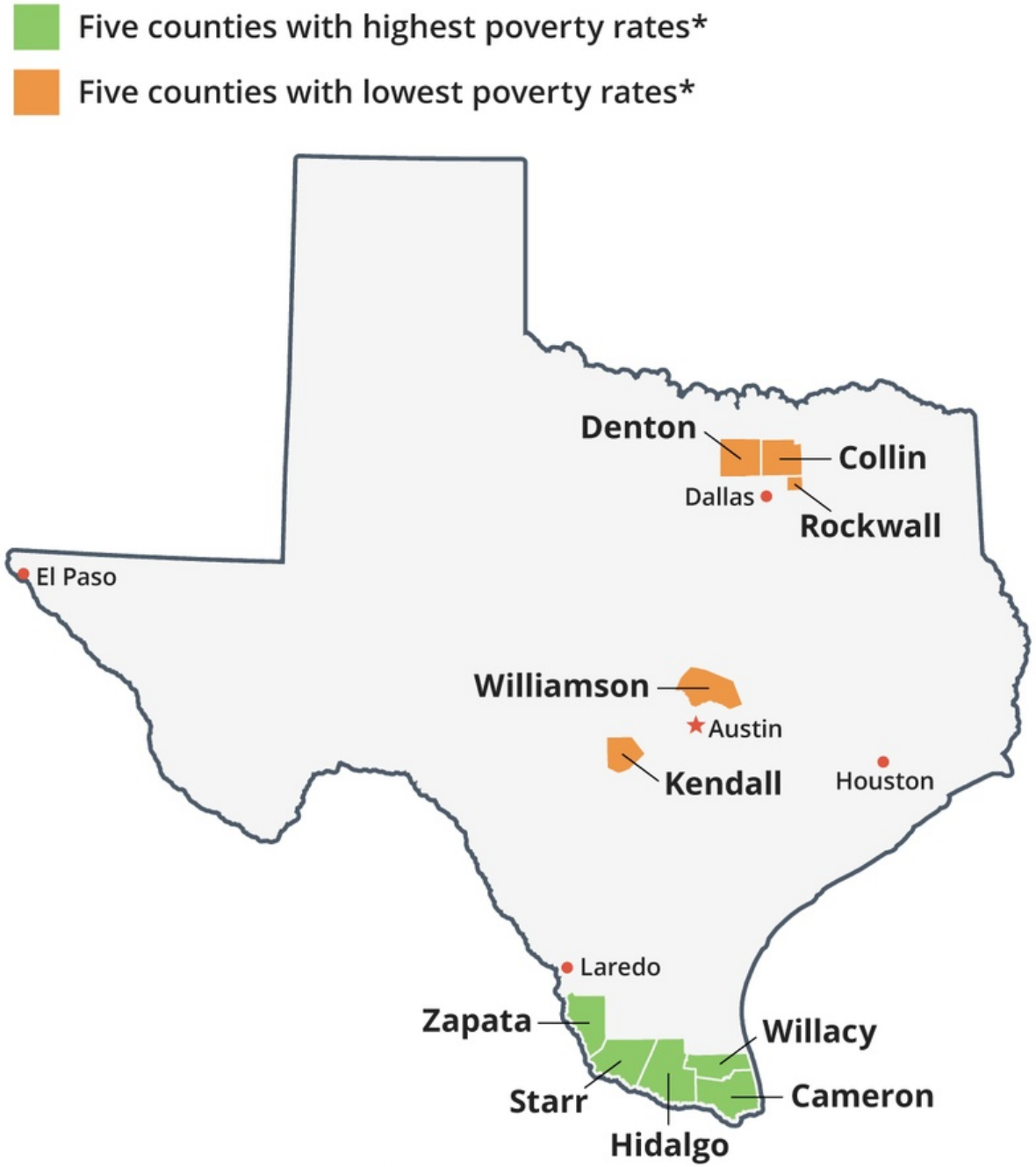


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# Deep South Texas: one of the poorest regions in the country.

>37,000 people live in high-risk colonias.
>126,000 live in "intermediate" health risk.

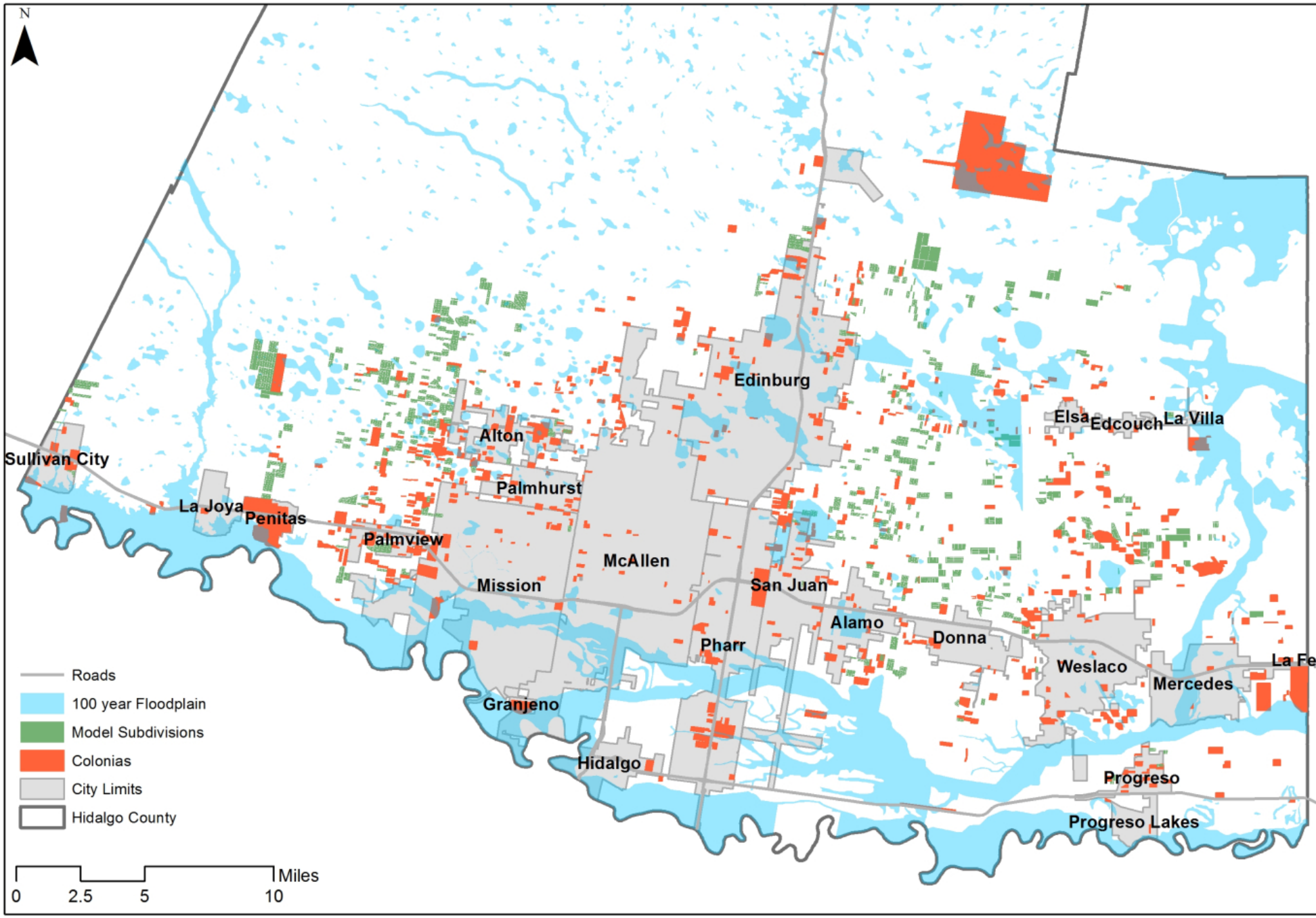
Starr, Hidalgo, and Cameron Counties
Population: 1.3 million people (2015)



# Over 900 Colonias in South TX

Cut off from municipal services and government-provided infrastructure:

- Wastewater disposal (as indicated by the presence of cesspools)
- Potable water supply
- Road surface
- Flood resiliency
- Legally subdivided (platted) lots
- Street lighting




**Colonias & Model Subdivisions in Hidalgo County**

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# Over 900 Colonias in South TX

- ❑ **Lack of infrastructure leads to health issues. Chronic diseases are rampant.**
- ❑ **Last year, the rate of tuberculosis in Hidalgo County was double the statewide average.**

- ❑ **55% of adults living in colonias have earned less than a high school diploma.**
- ❑ **High school dropout rates are close to 50%.**
- ❑ **About 45% lack English proficiency (compared to less than 10% of residents in the US overall).**

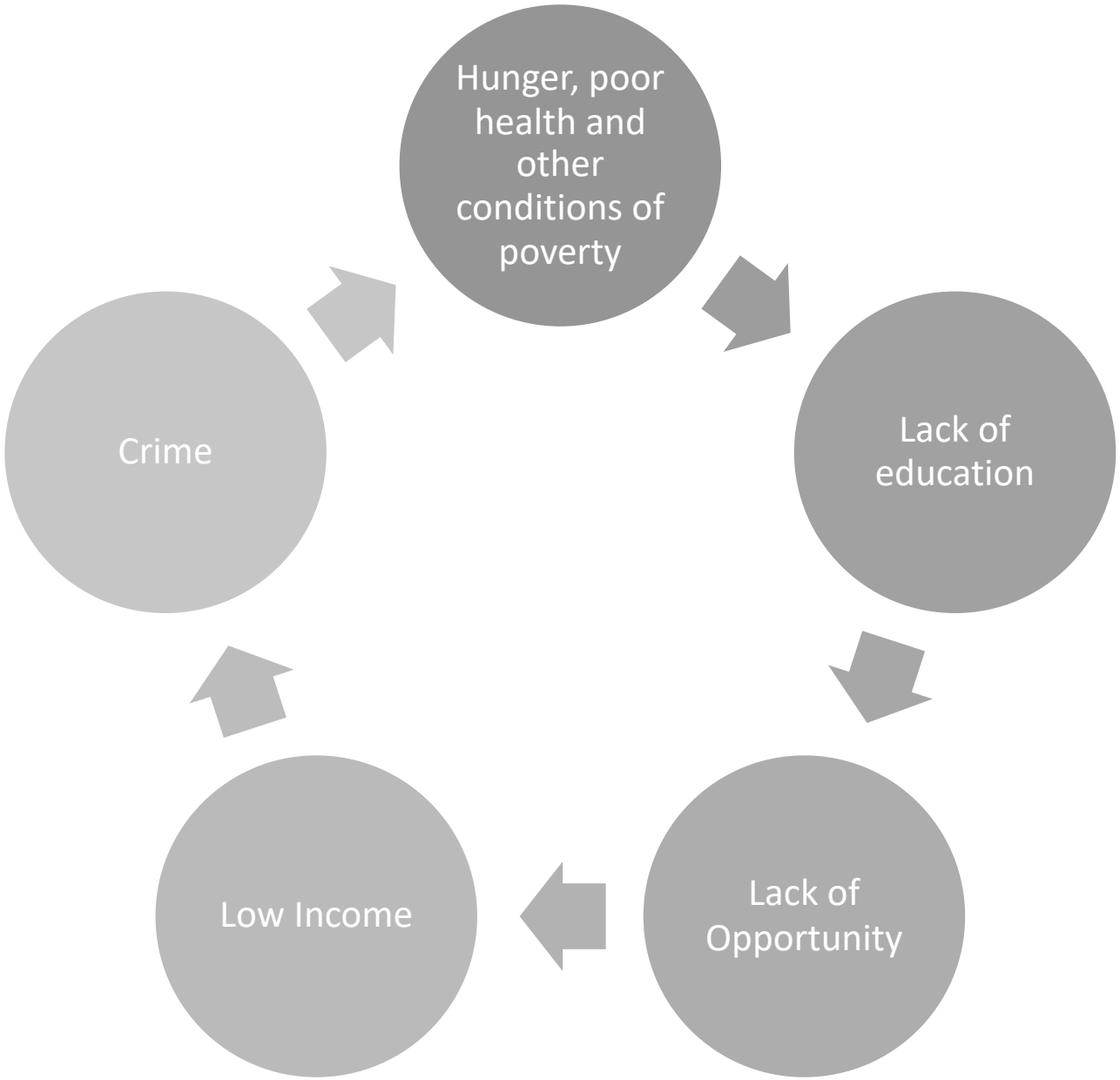
- ❑ **Unemployment rate of colonia residents is as high as 50% (compared to 5-9% Valleywide and 4% for Texas overall).**



texashousers • Follow

**texashousers** Texas Housers spent 2 days in the Rio Grande Valley's colonias, surveying the damage caused by last week's floods. More than a week later residents are wading through waste and swatting mosquitoes lingering in the standing water in yards and drainage ditches. Let's work to advocate for adequate infrastructure and drainage for all communities! #rgv #laluchasigue





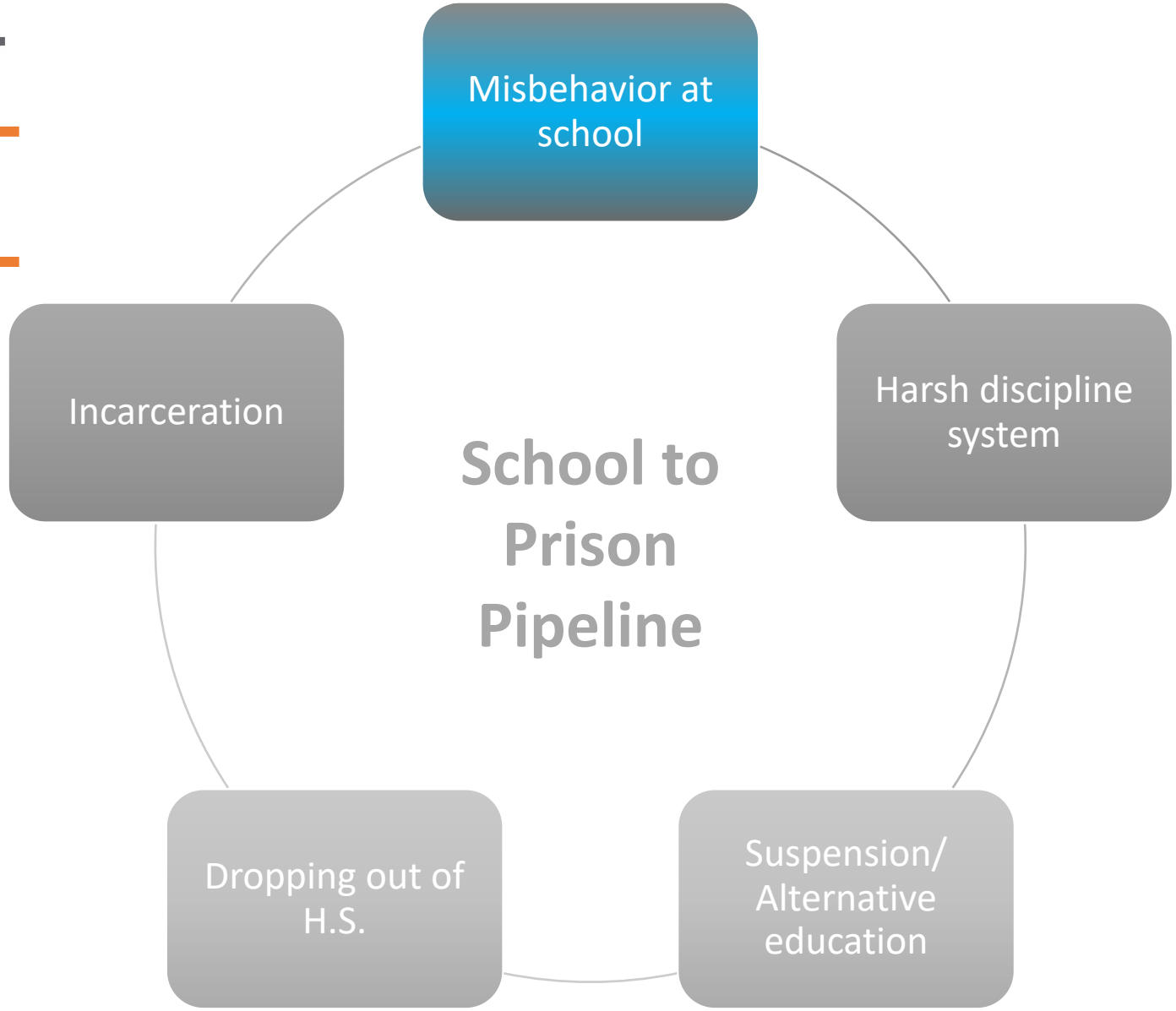

## Poverty and Lack of Education form a vicious cycle.

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# Poverty's Effect on Education

**Schools discipline students harshly for problematic behavior rather than rehabilitating the whole student.**

More likely to have physical conflicts and weapons possession
Higher absenteeism, tardiness
Lack of parental involvement
Higher verbal abuse & student disrespect of teachers



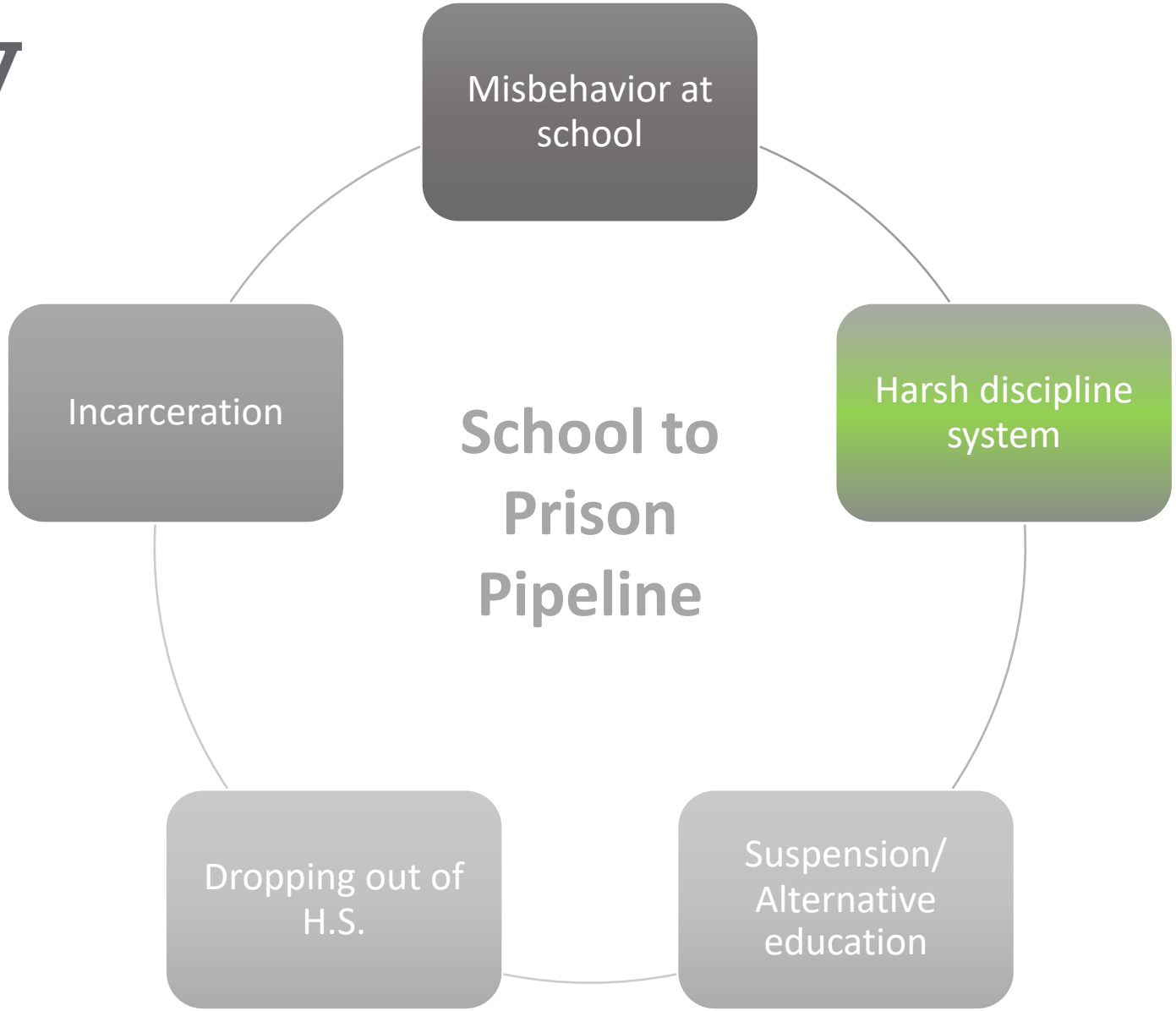
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**Schools discipline students harshly for problematic behavior rather than rehabilitating the whole student.**

Zero tolerance for student misbehavior: suspension, transfer to DEAP, juvenile detention, etc.

Reason for punishment is at teacher/administrator discretion….

About 59% of those students who were disciplined 11 or more times were later in contact with the juvenile justice system.



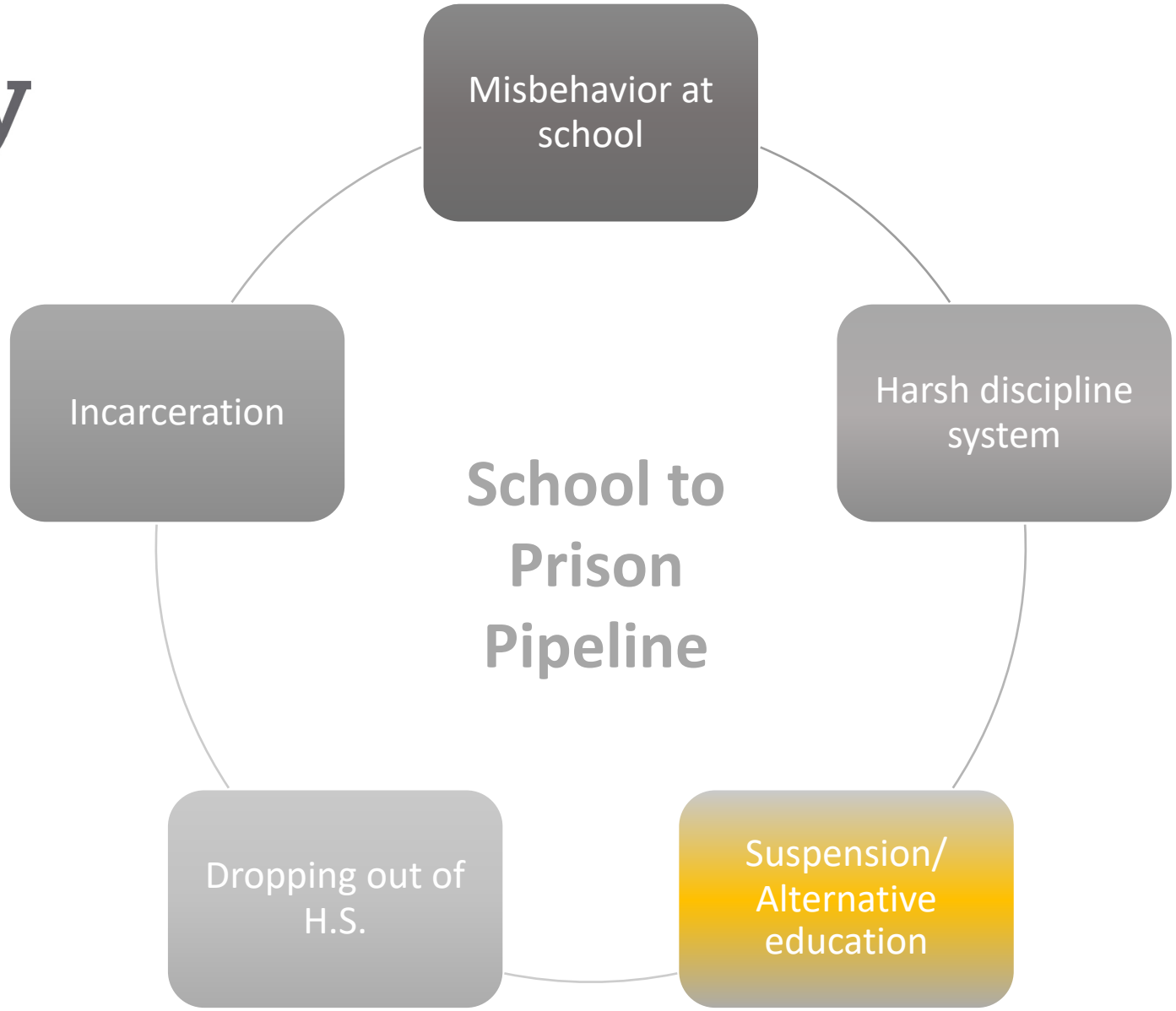
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## Discipline in the form of alternative education is often a stop in the pipeline.

A student who was suspended or expelled for a discretionary violation was nearly three times as likely to be in contact with the juvenile justice system the following year.

Just one out of school suspension in the 9th grade DOUBLES a student's risk for dropping out before graduation.

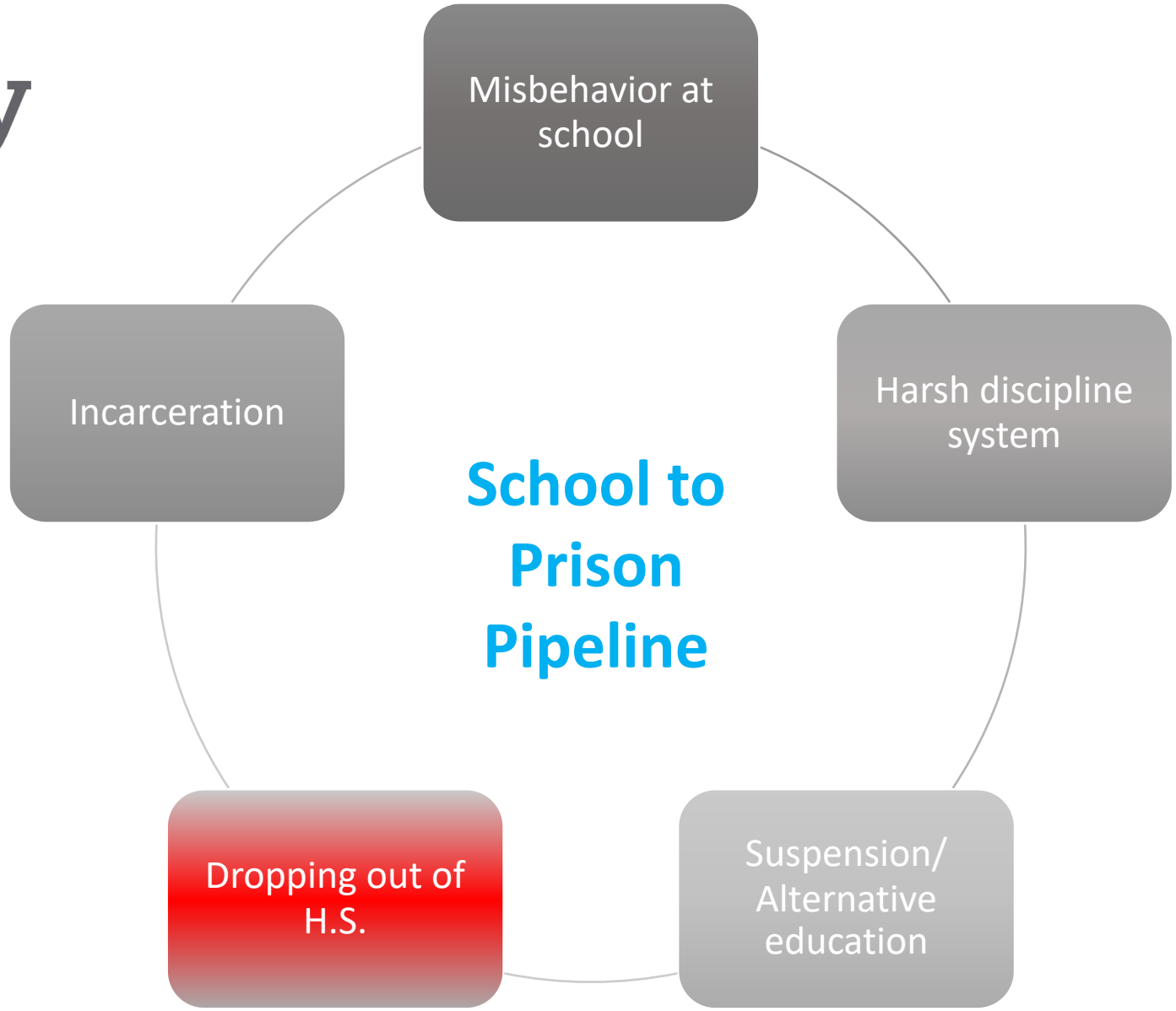
About 10% of students suspended or expelled between seventh and twelfth grade dropped out.



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**In the U.S., high school dropouts commit about 75% of crimes.**

2012 presidential election: 4% of dropouts voted compared to 24% of youth with a high school diploma and 37% with a college degree.
America's national security: students that leave high school without a diploma are not qualified to serve in the military.

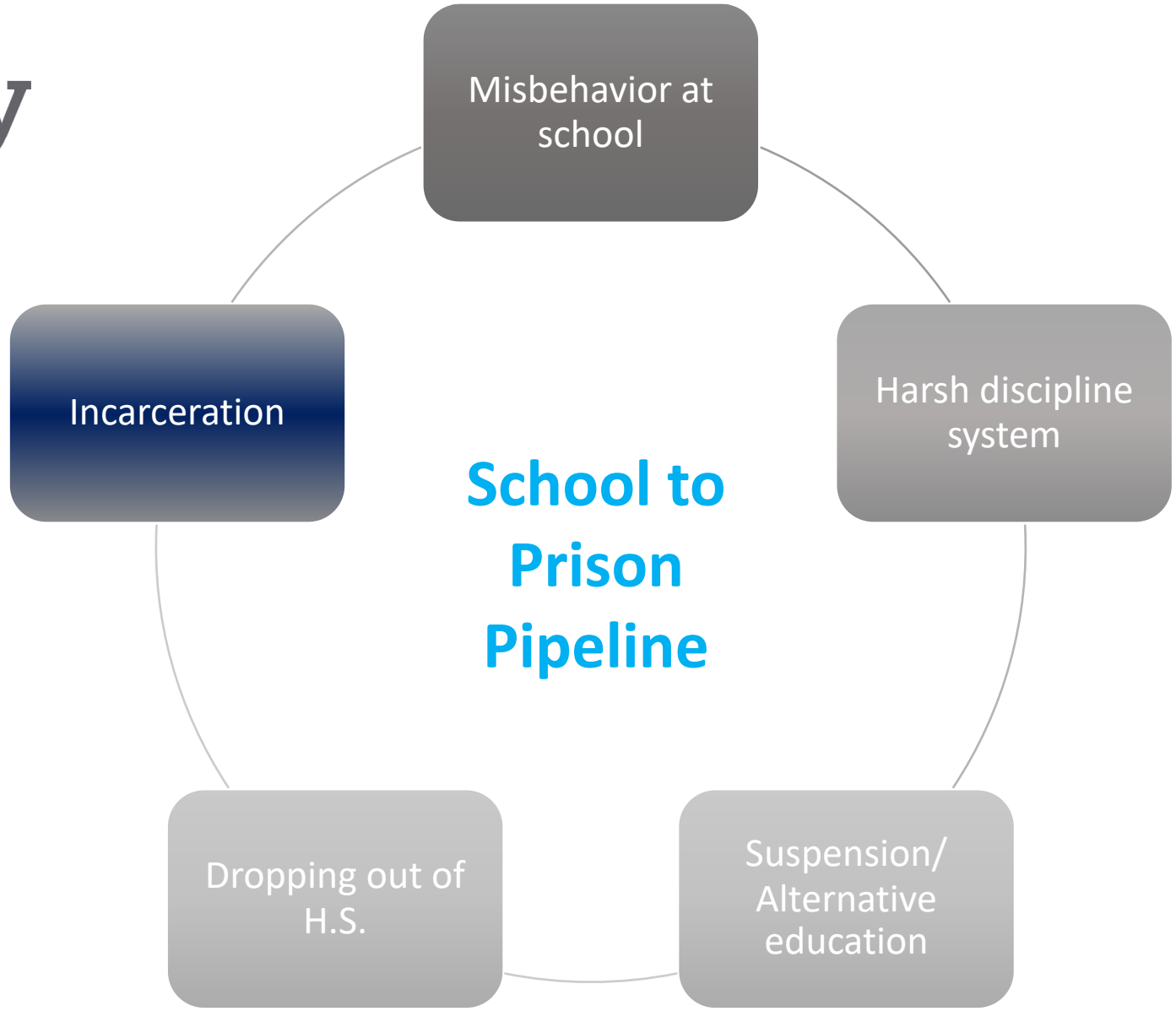


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## Youth incarceration leads to adult incarceration.

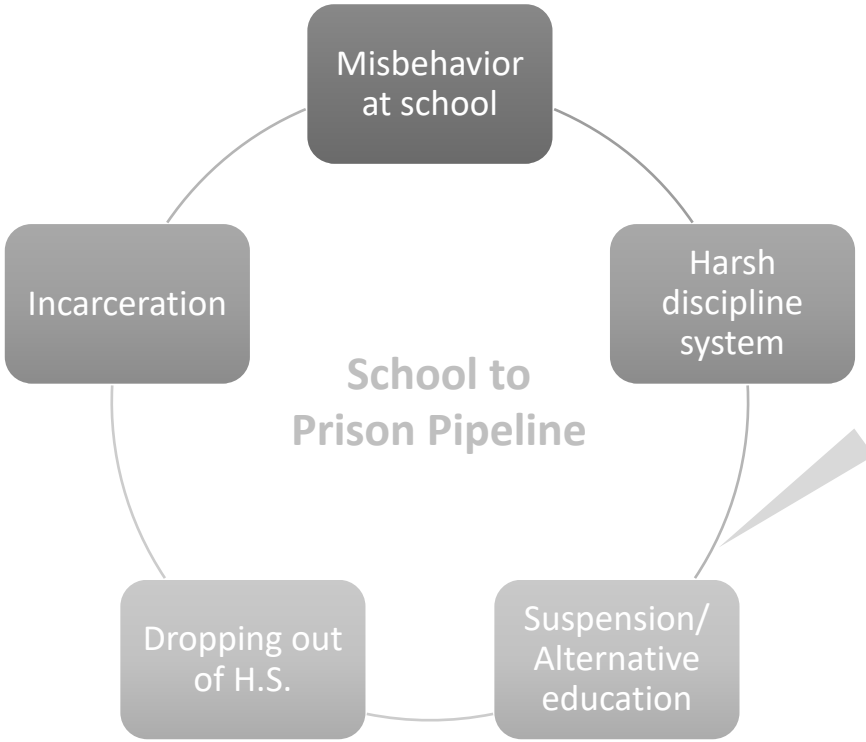
Juvenile incarceration increases the likelihood of being incarcerated as adult for violent crimes by 15%.

In Texas, more than eighty percent (80%) of adult prison inmates are school dropouts.



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# Education for Sustainable Development Redirects the Pipeline




Empathetic teachers and administrators encourage and empower students

Hands-on, student-driven, engaging projects reignite natural curiosity and passion for learning

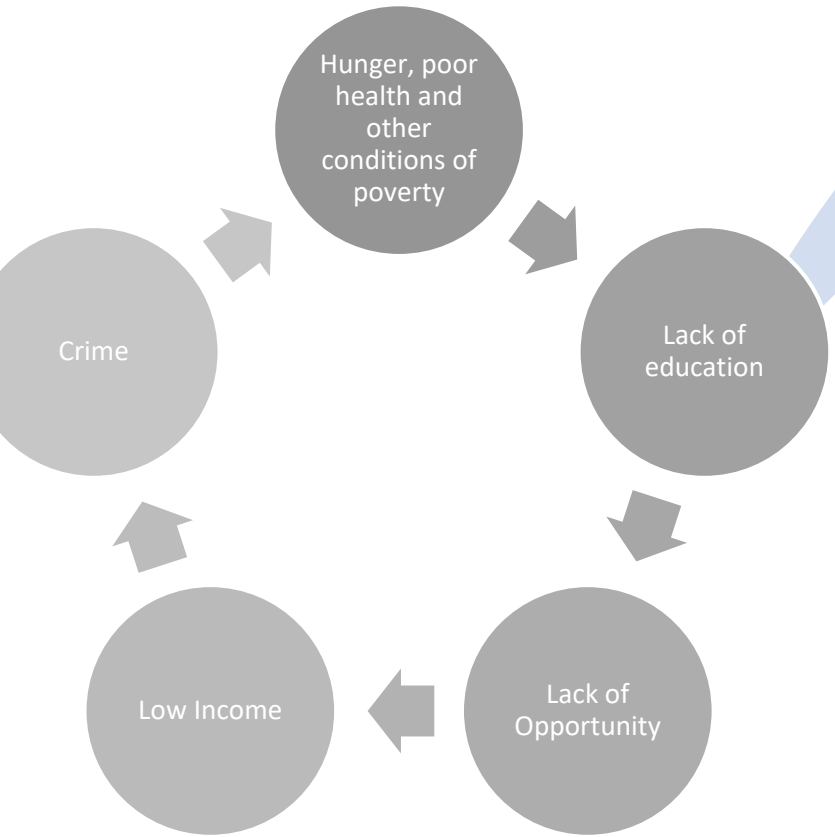
Student has a new sense of self and returns to their home campus

High test scores and High School Graduation

Enter the world of higher education or workforce armed with a toolbox for success

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# Education for Sustainable Development Intercepts the Regional Cycle of Poverty




Students gain soft skills such as self-confidence, time management, work ethic, and critical thinking

Students have the opportunity to present their work to their peers, teachers, university students and faculty, local businesspeople, and politicians at various venues.

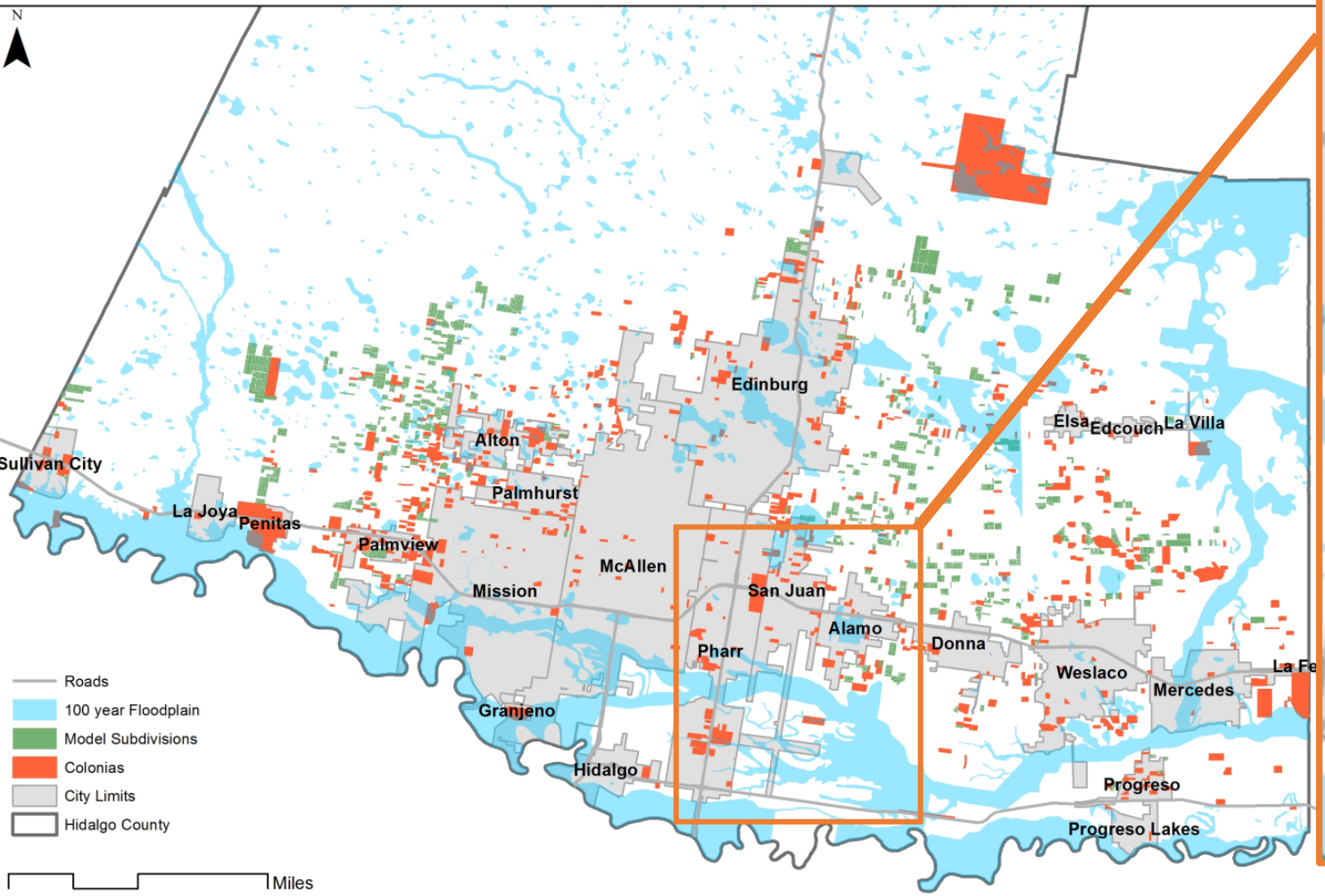
New curriculum development at Buell ESD through Project Based Learning (PBL) puts sustainability in students' hands.

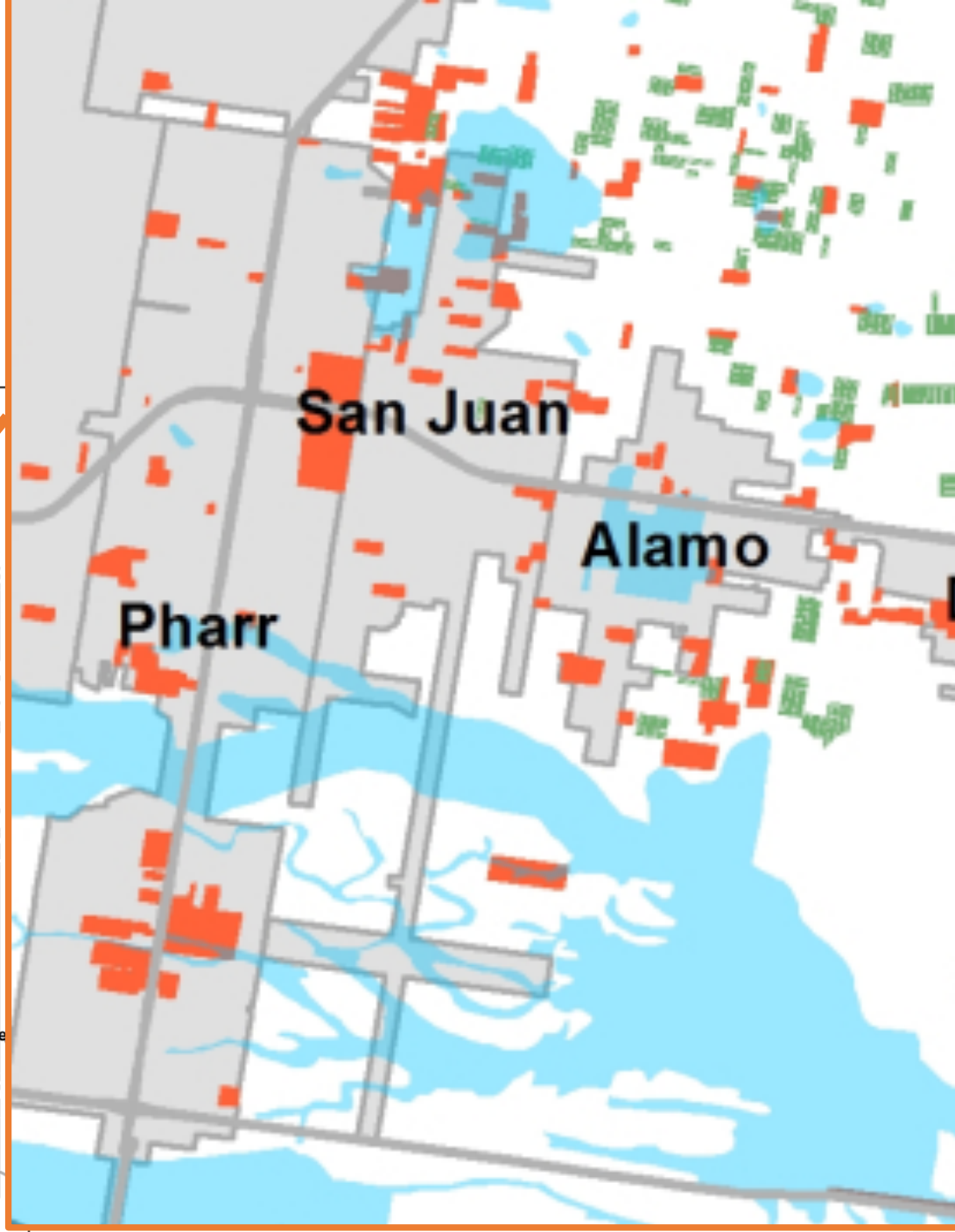
Students learn skills through their PBL ESD projects that they can take home and impact their communities: community gardens, community closets, and sports teams. Volunteering to help reduce youth gang impact.

Regional impact as Buell has shared curriculum development with other K-12 school districts and they begin to implement ESD in their schools.

# Buell Central Green Conservation/Restoration Program

**A case study of the Pharr, San Juan, Alamo (PSJA) ISD Disciplinary Alternative Education Program (DAEP) collaboration with UTRGV for ESD**



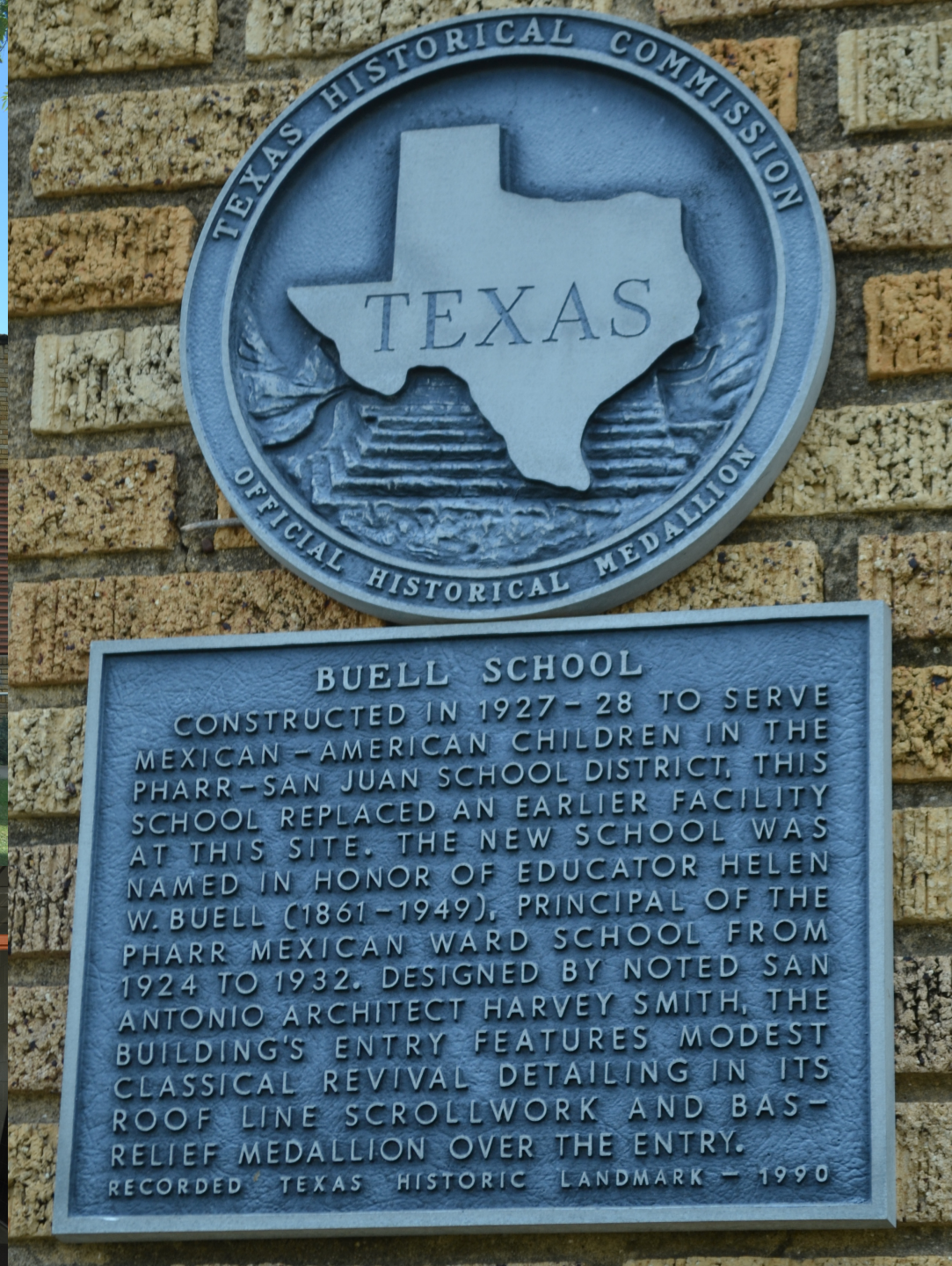






**Approximately 98% of Buell Central students experience:**

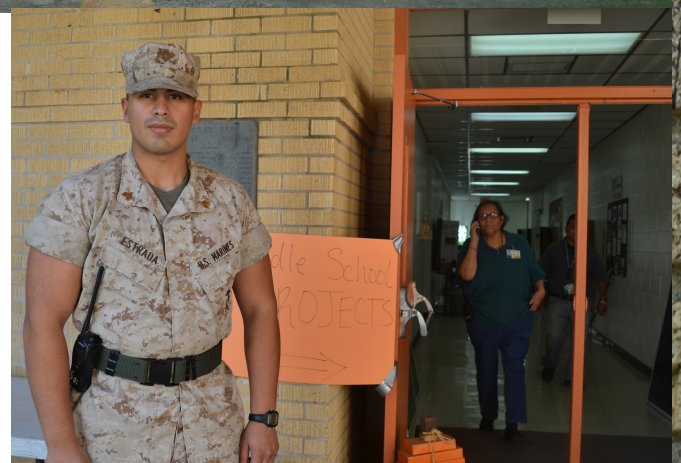
- Poverty
- Violence
- Racism
- Colonialism
- Homophobia
- Neglect
- Mental Illness
- Grief
- Abuse
- Sexual assault and exploitation
- Homelessness
- Undiagnosed learning difficulties




Metal detectors
Armed guards
Surveillance cameras
Military style uniforms

No air-conditioning
Poor building conditions












## Before ESD (2009)

## Buell Central under former principal: boot camp with a focus on discipline.




City of Pharr
Page Liked · June 21 ·

Pharr City Commissioners Mario Bracamontes and Daniel Chavez join First Responders yesterday to assist in rain event operations. Thank you for helping out!






Under new leadership, current campus environment is engaging and encouraging.







**“We feel like it’s our family - we get together and want to hang out.”**

**-Arturo Corona, an 11th grade student**

He said that teachers actually care about them and trust them to go beyond busy work.

**“If we ask, ‘Is it going to work?’ [our math teacher] says ‘Try it! Do it!’”**

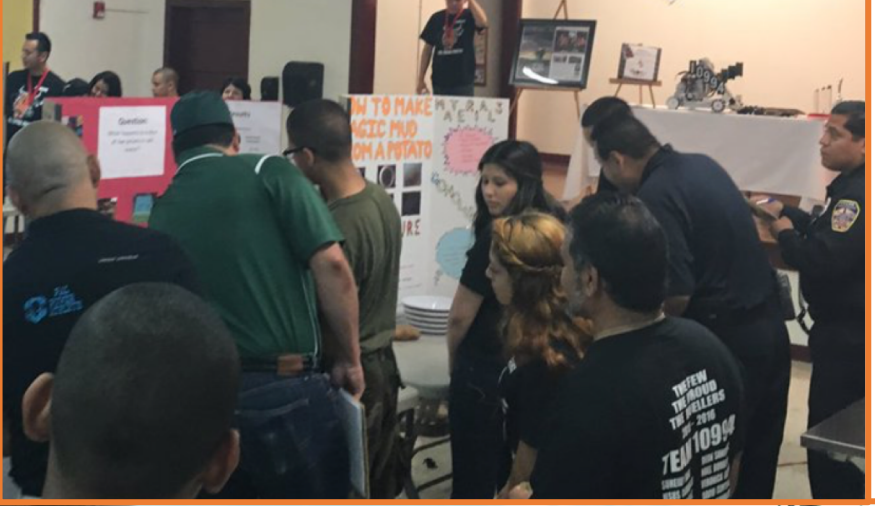
**“They don’t just think of us as ‘the bad kids’ here. I’m very proud of myself – just look at what we could accomplish in a very short amount of time!”**

**- Raul Loera, a 7th grader at Buell Central.**

*Loera said that he learned that it takes a lot of energy and hard work to get things done - but it’s worth it.*

**“It ends up looking really nice – like all the things you saw.”**





Principal Bracamontes invited UTRGV faculty, local Judges, and police officers to participate in the students' first science fair so the students could establish a positive relationship with them.














# UTRGV Deans visit the campus







UTRGV faculty from various disciplines regularly visit the campus and share their knowledge of sustainable development.




The Lower Rio Grande Valley of Texas is one of the most exciting localities in the United States for butterflying.

Many of the species that are resident in the Valley are essentially tropical and are rarely, if ever, found in other areas of the United States.




Hanging bucket gardens (tomato plants) and native plant garden





“I’m a good learner in school – I just have to keep my hands busy, know what I mean? I just can’t keep them without doing anything; that’s why I have a pencil with me at all times…”

- Raul Loera, a 7th grader at Buell Central spins a pencil around his hand before demonstrating the hydroponic floating garden project.

hydroponics is the cultivation of plants in water.



Aquaponics is a symbiotic environment that combines hydroponics with aquaculture (raising snails, fish, crayfish, etc. in tanks).







outdoor aquaponic
system and wall garden

# Closet nursery

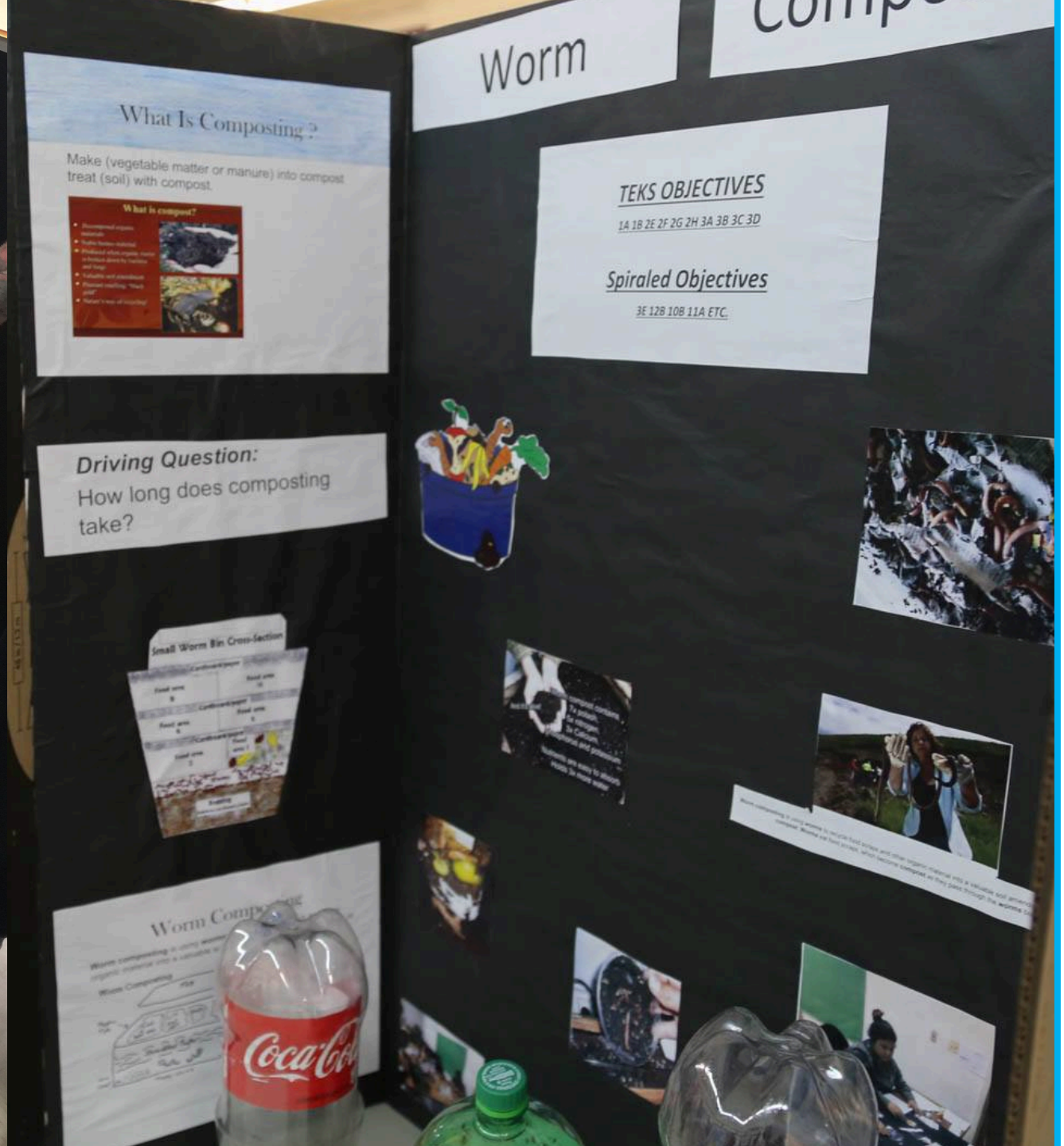




# Composting bin




Worm composting bin


Worm
What Is Composting?
Make (vegetable matter or manure) into compost
treat (soil) with compost.
TEKS OBJECTIVES
1A 1B 2E 2F 2G 2H 3A 3B 3C 3D
Spiraled Objectives
3E 12B 10B 11A ETC.
Driving Question:
How long does composting take?
Small Worm Bin Cross-Section
Worm Composting
Coca-Cola


LETTUCE
BASIL
PARSLEY
EGGPLANT
TOWER GARDEN


Indoor tower gardens

# Raising chickens to study free range vs caged chicken egg production



"Hillary" and "Trump"






Solar powered golf-cart

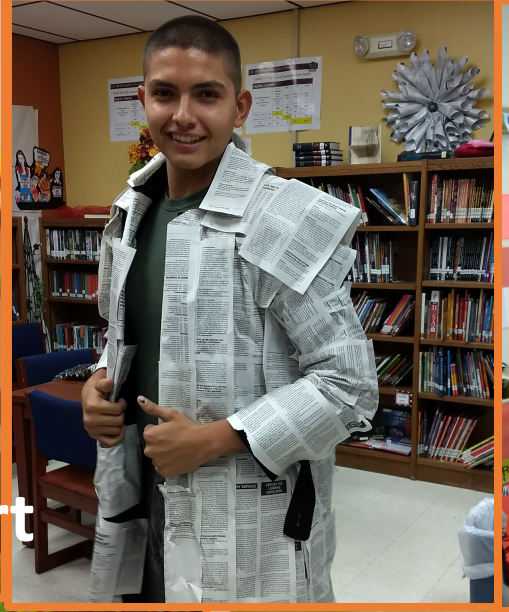



Rainwater harvesting

# Recycled/upcycled art















Recycled tire mulch

Tire garden planters




“I never thought I would be able to do something like this.”
UTRGV EARTH
Ice cooler air conditioners:
Students explained that the unit converts DC energy to AC energy



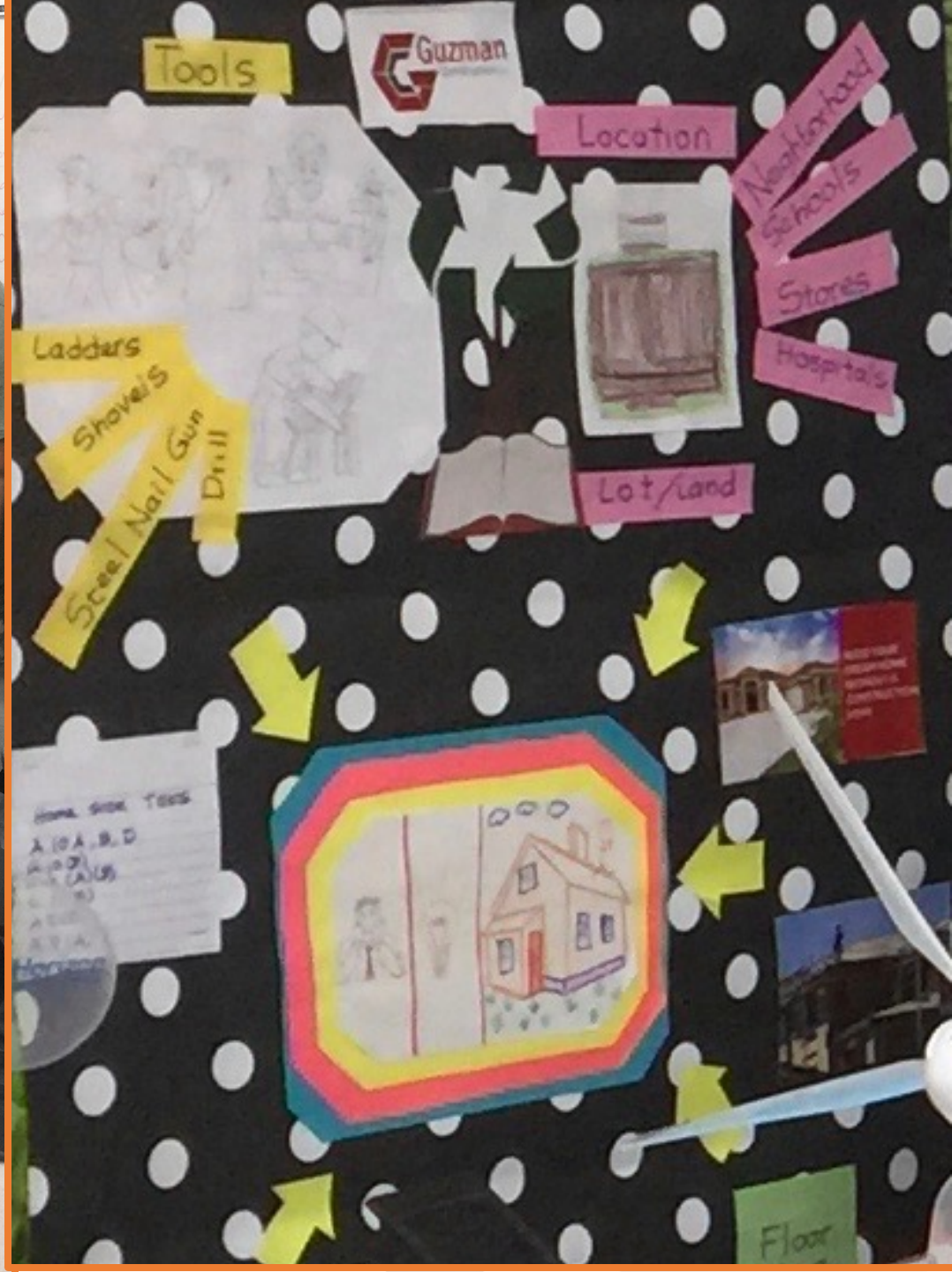
Tree house project:

- Repurposed wood
- Solar panel powered





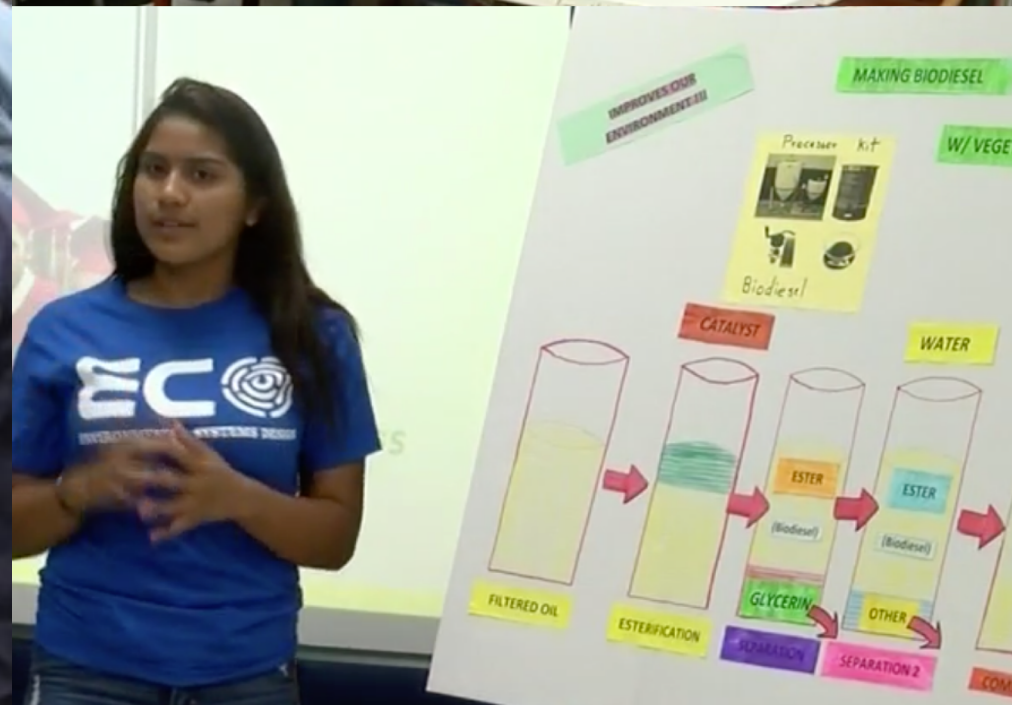

Net Zero model dream home





Four military Hummers are used to study clean energy alternatives such as the conversion of restaurant oil into biodiesel.



“

We do a lot of counseling.

We do a lot of advising, but guess what?

Once the kid is off drugs and out of the gangs - they come and ask you, ***“What now?”***

- Principal Mario Bracamontes.





- ✓ **Basketball**
- ✓ **Boys/Girls Rugby**
- ✓ **Golf Club**
- ✓ **Soccer Team**
- ✓ **Ping-Pong**
- ✓ **Chess Club**
- ✓ **Culinary Club**
- ✓ **Mock Firm Trial**
- ✓ **Robotics Team**
- ✓ **Sustainability Club**




> Rugby keeps me out of trouble. My mom says if I get in trouble I can't play, and I love it, so – No. I'm thankful they gave us this second chance to get better."
> – Tameka de Leon, Adelitas Rugby player

10 REDUCED INEQUALITIES

# Adelitas winning at Baylor State Championship

17 PARTNERSHIPS FOR THE GOALS

Because of the only local team's obvious success, the Pharr Police Department and the Pharr Boys and Girls Club adopted the Toros and Adelitas, and provide them with funding for out-of-town tournaments.











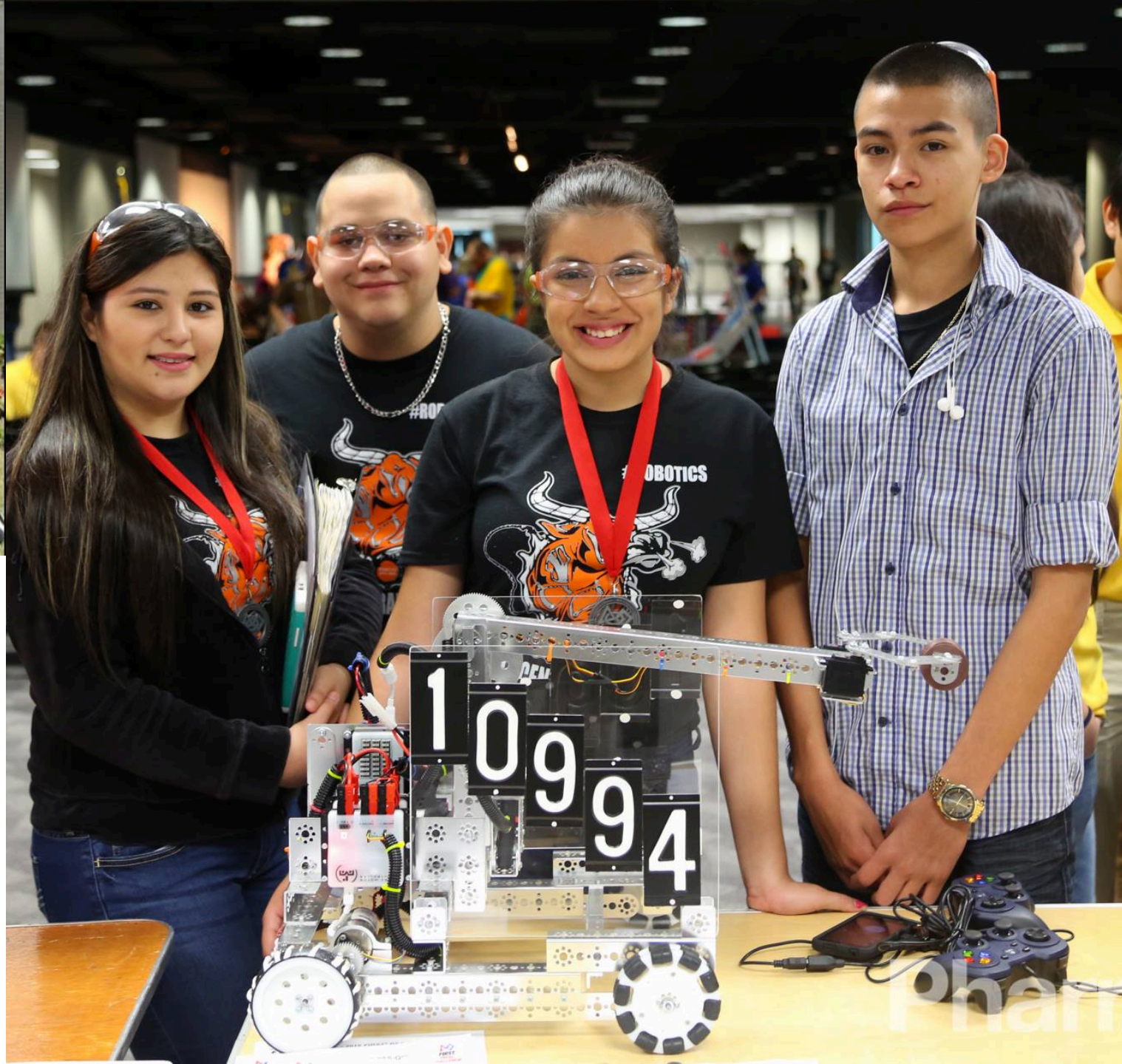

GUIDE 147







The Buell robotics team placed in St. Louis, MO for the FTC Robotics World Championships in April and competed among the best robotics teams in the world.
More than 3,000 teams of 14-20 year olds build and program a robot, and then compete with each other.



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# SALT New American Table Field Trip

- Food handler certification, Security guard certification










The number of students who return to Buell has been steadily decreasing since the program began in 2014.

| | |
|---|---|
| 79 | **2012** |
| 77 | **2014** |
| 63 | **2015** |
| 58 | **2016** |
| 39 | **2017** |



Work Ethic

Communication Style

Team Work

Personality

- ✓ Determination
- ✓ Empathy
- ✓ Community Involvement
- ✓ Confidence

- ✓ Adoption of Jones Box park
- ✓ Community benches/wood Furniture
- ✓ Animal Shelter and Pharr Athletic League Volunteering
- ✓ Establishing Pharr Food Bank community garden and chicken coop
- ✓ Rebuilding community bikes
- ✓ Donating organic produce

**Students are engaged because they see their ESD projects impacting their communities.**



City of Pharr
@PharrTx
Follow

@TeamGeorgeP congratulates @PSJAISD Buell Central students for their hard work in volunteering at the Pharr P.A.L.











Students displayed their projects at UTRGV Earth Fest and interacted with university students and faculty, gaining a sense of belonging on a university campus by participating in scheduled events like yoga and painting a potted plant.



















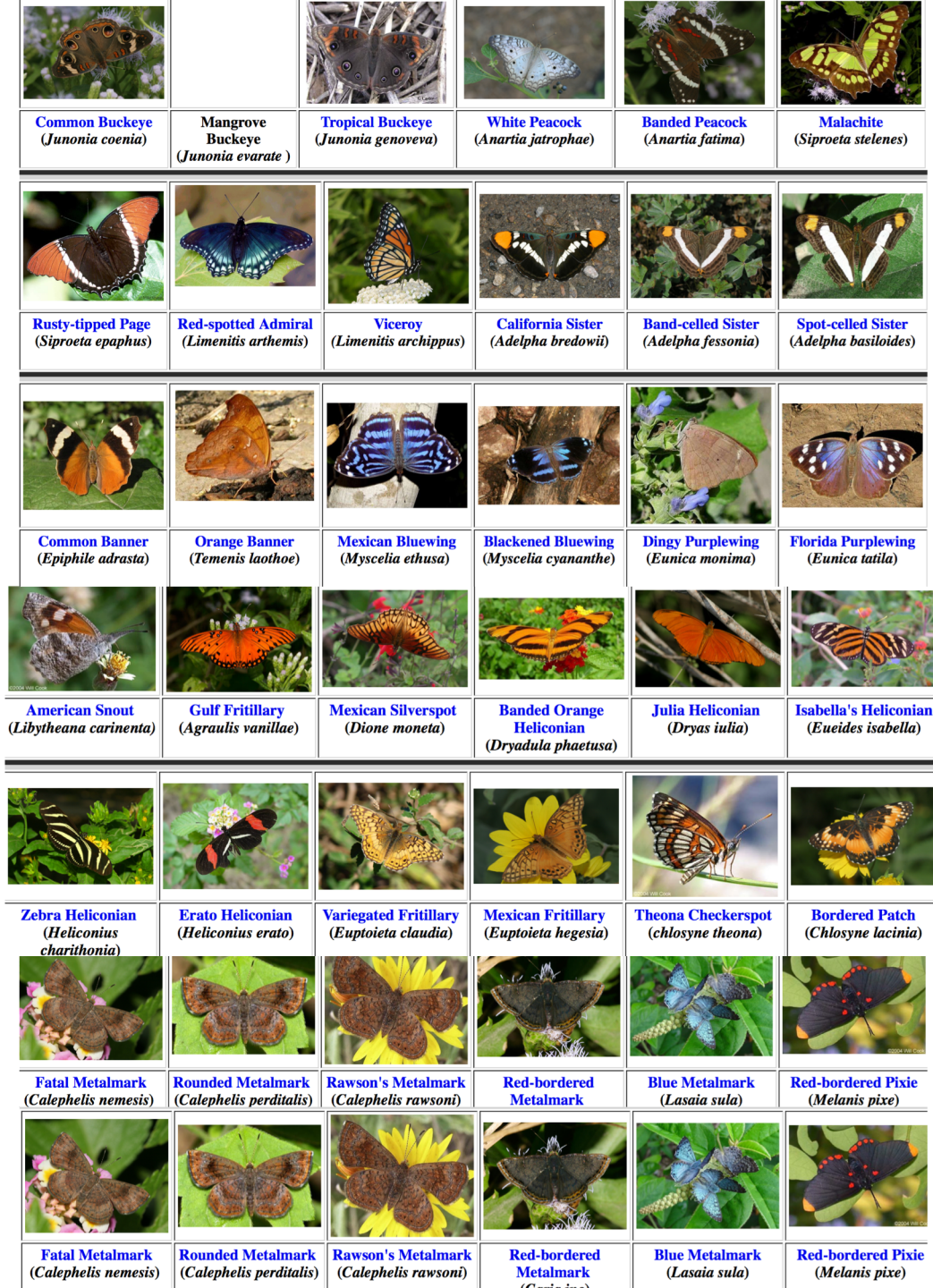

- ✓Valley Environmental Summit
- ✓UTRGV ICSAC Conference
- ✓Alternative energy conference in Colorado



**PSJA ISD has been in the forefront of a Learning Landscapes collaborative initiative. The initiative has been designated a valued partner as a Conservation Wrangler by Austin-based, nonprofit Texan by Nature.**

“Scientific research tells us that children and adults must reconnect with nature for mental and physical well-being. This collaborative provides a framework for students to learn about native habitats and ecosystems as well as improve their academic skills through hands-on inquiries into the natural world.”

Tina Bufford, Texan by Nature’s board president.






- **Principal Mario Bracamontes presented to educators at PSJA's 2nd Annual Best Practices Conference.**

*Session "Sustainability and Curriculum into 21st Century Learning" led by Principal Mario Bracamontes.*



"This campus is one shining example of turning around lives not only in the Rio Grande Valley, but throughout the state. These kids are examples of how they are outperforming their peers and helping make Texas competitive."

-Texas Land Commissioner George P. Bush

Almost 2,000 high schools across the U.S. graduate less than 60% of their students.
These "dropout factories" account for over 50% of the students who leave school every year.
1 in 3 minority students (32%) attend a dropout factory, compared to 8% of white students.







Less than high school graduate
Median Income: $19,233
Unemployment: 15%

High School Graduate
*(including GED)*
Median Income: $26,995
Unemployment: 11%

College Diploma
Median Income: $47,693
Some College
Unemployment rate: 8%

Graduate or
Professional Degree
Median Income: $62,678
Unemployment rate: 5%

## "Education is the escalator out of poverty."

-Nicholas D. Kristof, New York Times, October 19, 2011

Sources: Bureau of the Census, 2007-2009 American Community Survey 3-Year Estimates
U.S. Bureau of the Census American Community Survey 2009

# Thank you!

We hope to return to give an update on this transformative program.

**Sustainability@UTRGV.edu**

