



The Network
for Public Health Law

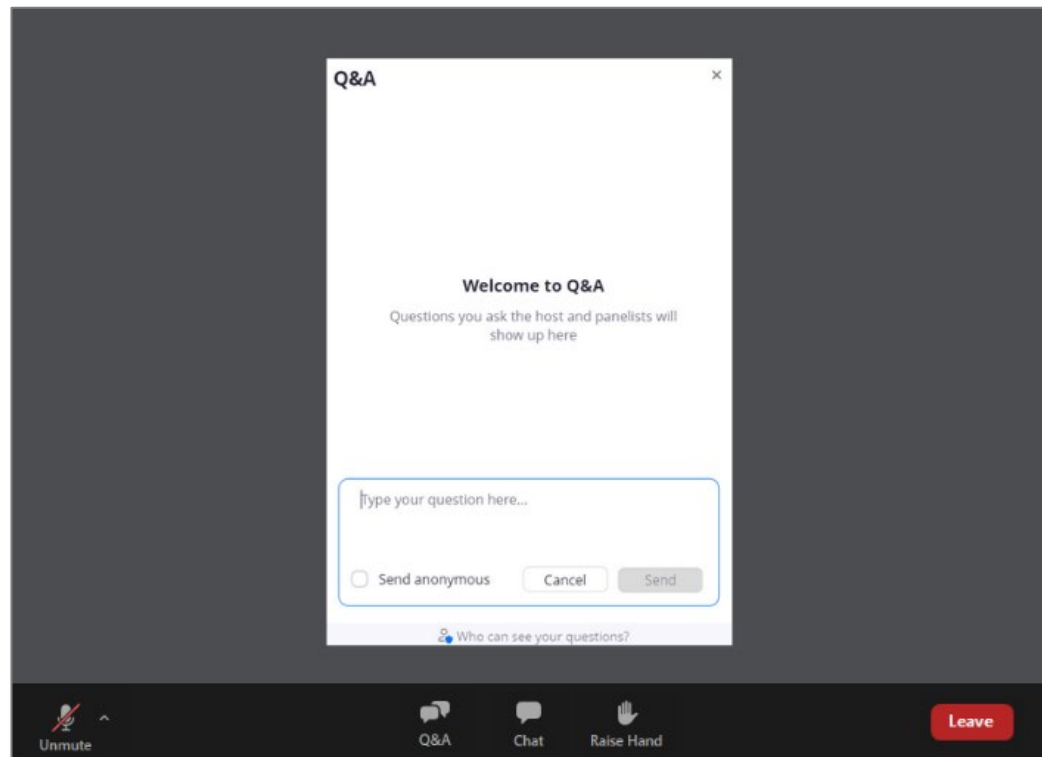
Ideas. Experience. Practical answers.

Ensuring a Just Transition in All Aspects of Climate Action

2:00 p.m. – 3:30 p.m. EST | July 27, 2022

Zoom Q&A

1. Open the Q&A panel
2. Type your question
3. Click “Send”



Moderator



April Shaw, Ph.D., J.D, senior staff attorney—Network for Public Health Law, Northern Region Office

Presenter



Aysha Pamukcu, J.D., Policy
Fund Director, San Francisco
Foundation, and founder,
Movement Praxis

Presenter



Nicole Horseherder, M.A.,
Executive Director, Tó Nizhóní Ání
“Sacred Water Speaks”

Presenter



Christopher Ramírez, Executive
Director and Co-Founder,
Together for Brothers

Presenter



Carlos Claussell, M.A., Senior
Program Officer, Institute for
Sustainable Communities



Tó Nizhóní Ání Establishment



- Established in 2001
- Formed in response to PWCC excessive use and waste of Black Mesa groundwater
- Navajo communities needed a voice and a way to mobilize

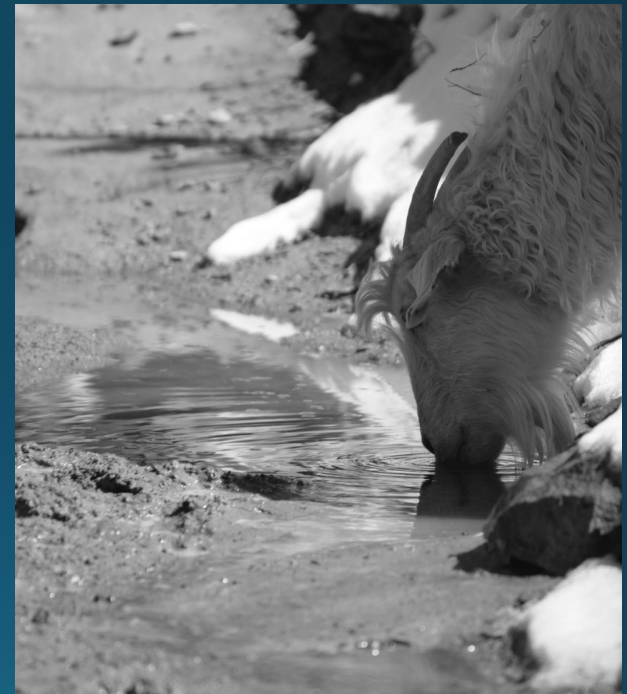
Mission & Vision

Mission Statement:

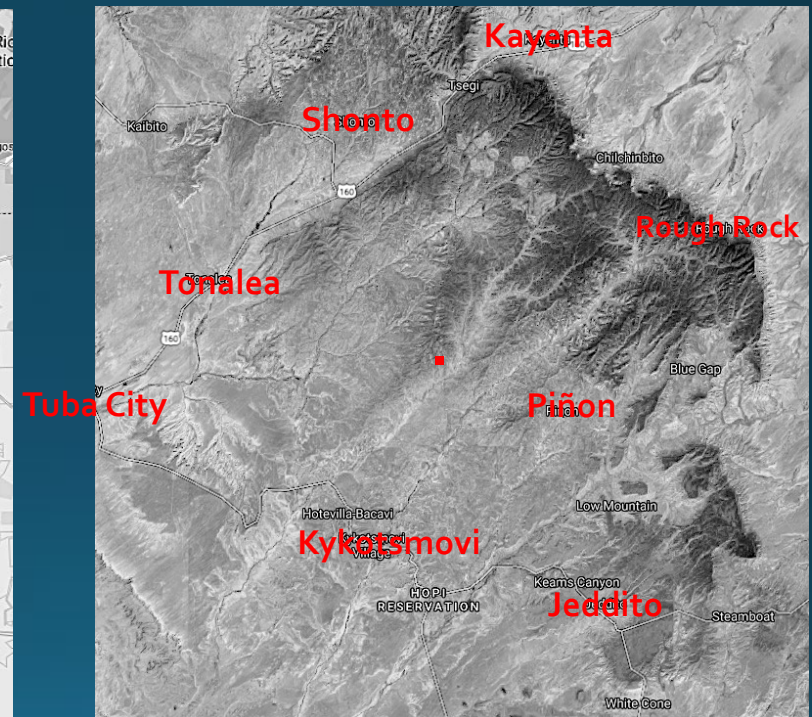
To advocate for the wise and responsible use of the natural resources of Dził Yíjiin. Our work is rooted in the protection of our water. As we end the industrial use of precious water sources, we also end the use of fossil fuel.

Vision Statement:

To preserve and protect the environment, land, water, and air for the people of Dził Yíjiin and for generations to come.



Dził Yíjiin (Black Mesa)



Place-Based Approach



- Targets environmental issues at the “grassroots” level. Our work connects science and tech info with our Diné culture.
- Seeks to mobilize members and communities through education, direct action, and other strategies.

Place-Based Approach



- Chapter, Agency and NNC Resolutions

Place-Based Approach



- Relationship, k'é and teachings - Nahasdzaán dóó Yádiłhił
- Environment - tó, nilchi, sháńdíín
- Livelihood - iina (ranching, farming, weaving..)

Campaigns



Water

1. Environmental Justice
2. Just & Equitable Transition
3. Climate Change

Water

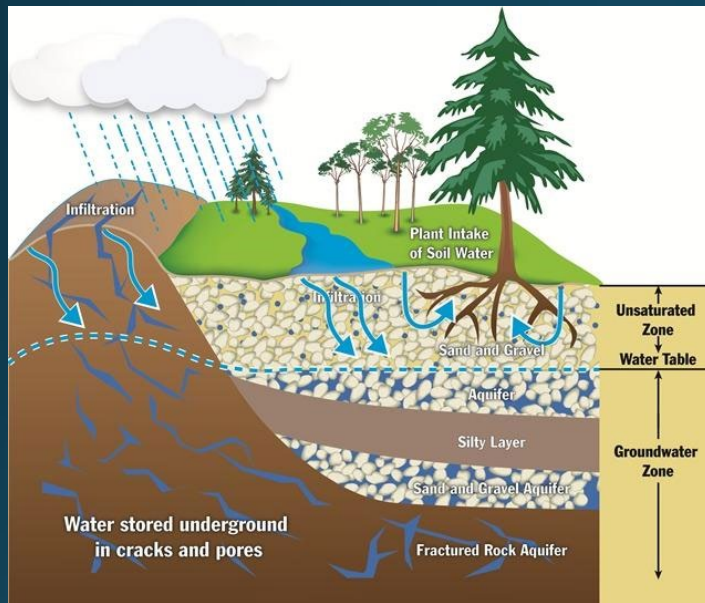


For millennia, the people of Black Mesa have relied on seeps and springs brought to the surface by natural fissures in the rock and ground.

How do we protect Black Mesa sole source aquifer?

How can we transfer the power created to address all water

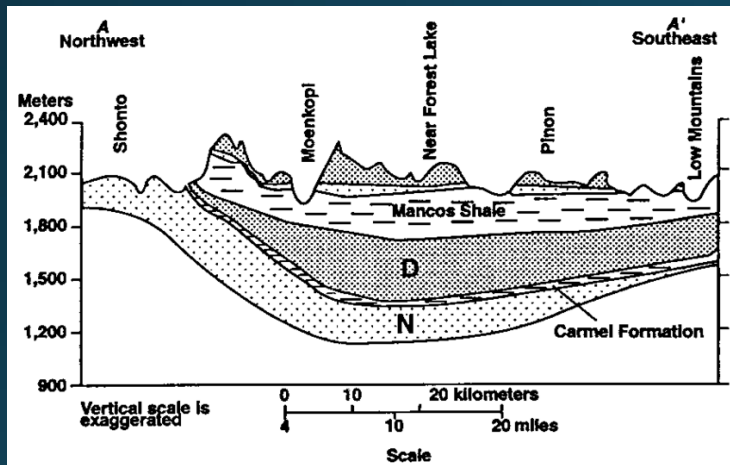
Water - Aquifers



Groundwater Diagram. Department of Environment & Conservation,
Government of Newfoundland & Labrador (2016).

- An aquifer is a body of porous rock or sediment saturated with groundwater.
- Groundwater enters an aquifer as precipitation seeps through the soil and collects in empty spaces deep underground.
- Groundwater can move through the aquifer and resurface through springs and wells.

Water – Dził Yíjiin



Cross section of the Black Mesa basin. Modified from Cooley et al. [1969]

1. **Toreva (T-aquifer)**, 300-400 feet below – livestock water
2. **Dakota (D-aquifer)**, 500-800 feet below – livestock water
3. **Navajo (N-aquifer)**, 2,500-3,000 feet below – drinking water for Dził Yíjiin region.
4. **Coconino (C-aquifer)**, 4,000 feet below – deepest and largest overall (seven million acre feet of water).

Water



- 2,500 - 3,000 feet below
- Formations that hold the N-aquifer:
 - Navajo Sandstone
 - Kayenta Formation
 - Lukachukai Member of Wingate Sandstone
- Only source of drinking water for Dził Yíjiin region:
 - Dził Yíjiin communities
 - Hopi Tribe
 - Municipalities: Moenkopi, Tuba City, Kayenta
- Naturally satisfies EPA's standard for drinking water

1. Environmental Justice



Since 1970s coal mining industry has been tapped into the local aquifers for their operation, impacting the quality and quantity of the water.

How do we bring Industry into compliance and protect the water?

The Black Mesa Mine



Black Mesa Mine

- 5 million tons of Black Mesa coal is transported via slurry to Mohave Generating Station annually
- Black Mesa Pipeline, the only coal slurry system in the world slurried 4,400 acre-feet of water annually (1 football field = 1 acre)

Mohave Generating Station (MGS)

- 2nd largest utility station in the U.S. located in Laughlin, Nevada
- powers cities such as Tucson, Phoenix, and southern California
- 1,510 mega watt power plant
- Released on average: 19,000 tons of nitrogen, 40,000 tone of sulfate dioxide
- Owners failed to retrofit power plant - Plant closure: 2005

The Kayenta Mine



Kayenta Mine

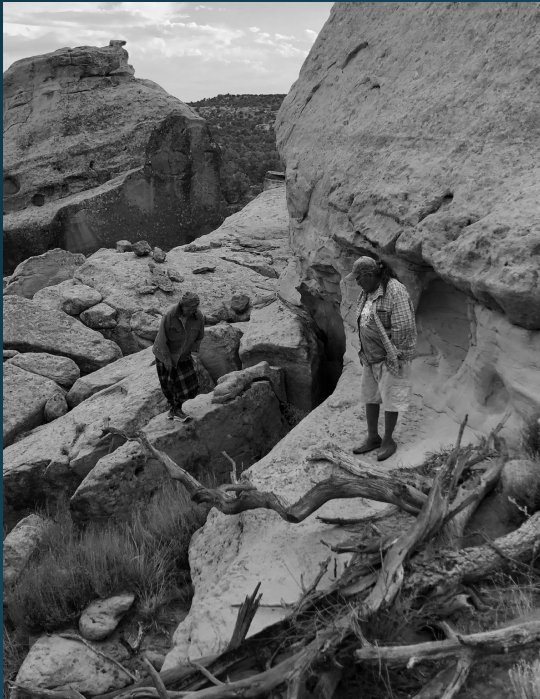
- Location: Peabody Lease Area, AZ
- Transported 8 million tons of coal via rail 98 miles to NGS
- Used 1,200 acre-feet of N-aquifer annually
- Workforce: 265, 90% Navajo and Hopi.
- Kayenta Mine closed in August 2019

Navajo Generating Station

- 2,310 mega watt coal generated plant
- Largest power plant in the west
- Largest emitter of green house gasses, (17 mil metric tons ann)
- Uses 31,400 acre-feet of the Colorado River water annually
- Workforce: 500, 90% Navajo and Hopi.
- Closed in November 2019

Industry Impacts

Bringing in the Science



- Elder's and farmers/ranchers noticed changes in:
 - springs discharge
 - wash discharge
 - precipitation
 - changes in water quality
 - changes in water quantity

National Resource Defense Council (NRDC) Study



- *Drawdown: Groundwater Mining on Black Mesa - 2000*
- *Drawdown: An Update on Groundwater Mining on Black Mesa – 2006*

NRDC Study

Findings:

- N-aquifer shows signs of material damage and continuing decline.
 - Structural stability
 - Water quality
 - Discharge to springs
 - Discharge to washes
- Flawed modeling of:
 - U.S. Geological Survey's 2D model
 - Peabody's 1999 3D flow model
 - Short comings of Peabody's 2005 Supplement

Recommendations:

- Peabody permanently cease groundwater pumping of N-aquifer.
- Department of Interior improve monitoring of N-aquifer
- EPA designate N-aquifer a “sole source aquifer” (government protection)
- Respect tribal sovereignty

California Public Utility Commission (CPUC) & Mojave Generating Station



TNA become intervenors with BMT in the proceeding on the Disposition of MGS.

- A guarantee of water and coal is needed for owners of MGS to invest in upgrades and commit to new contract.
- Two proposals are made as alternatives to continuing MGS
 1. Construct Integrated Gasification Combined Cycle (IGCC) facility
 2. Commercial scale solar plant to replace energy loss at Mohave

*on the premise that both alternatives use less water

Significant Win



Both the NRDC study and Intervening with BMT in the California Public Utility Commission brought new attention to the health and impacts of the Navajo Aquifer and in 2005 the Mohave Generating Station shutdown which led to the closure of Black Mesa Mine and ultimately the ending of the pumping of the Navajo

2. Just & Equitable Transition



- In the wake of coal plant and mine closures how do we get support to move forward. How do we get on a new path towards a future free of fossil fuels and corporate structures where Navajo has no investment opportunity.

Coal Plants/ Black Mesa

Plant	Mine	Owner	Operator
Mojave Generation Station	Black Mesa Mine	<ul style="list-style-type: none">• Southern California Edison• Los Angeles Department of Water and Power• Nevada Power• Salt River Project	Southern California Edison
Navajo Generating Station	Kayenta Mine	<ul style="list-style-type: none">• U.S. Bureau of Reclamation• Salt River Project• Los Angeles Department of Water and Power• Arizona Public Service• Nevada Energy• Tucson Electric Power	Salt River Project

Coal Plant & Mines/ Navajo Nation

Plant	Navajo Generating Station	San Juan Generating Station	Four Corners Power Plant	Cholla Power Plant
Mine	Kayenta Mine	San Juan Mine	Navajo Mine	McKinley Mine (2009)
Location	Navajo Nation, Page, AZ	Near Farmington, NM (South of NN)	Navajo Nation near Farmington, NM	Joseph City, AZ (south of NN)
Workforce	500 at NGS, 365 at mine, 90% Navajo and Hopi	400 at SJGS, 500 at the mine, 50% Navajo	500 at the plant, 500 at the mine, 80% Navajo	200
Closure	November 2019 (25 years early)	2 units closed in 2017, 2 more will close in 2022 (3 decades early)	3 units closed in 2013. Remaining 2 will close in 2031 (7 years ahead of schedule, maybe sooner)	1 unit closed in 2016, another closing in 2020, last 2 units in 2025 (years early)

Just & Equitable Transition



JET for TNA is the concept that owners of coal plants and coal mines and beneficiaries cannot just walk away in the event that coal plants or mines close. They must provide support that would help impacted communities transition.

Just Equitable Transition

A “just equitable transition” means that local communities that are economically dependent on coal are not left behind as coal-fired power plants and coal mines close and the world shifts to cleaner energy sources. It means that those who have suffered the direct impact of nearby mining and coal combustion are compensated in some way to make reparations that will allow basic improvements to their standard of living. It means power generators and users make efforts to assist these communities in transitioning to new modes of economic development by providing them with financial and technical assistance

Just Transition support, includes (but is not limited to) resources for:

- Replacing lost tax revenue at the community level to help impacted emergency services, social services.
- Worker redeployment, retraining, and compensation.
- Provision of basic services that were precluded by mine and plant operations.
- Reparations for lost, deprived or damaged land, water and health
- Reclamation and remediation work at facility sites; and
- Planning and implementation for new, sustainable economic development such as solar generation.

3. Climate Change



- Coal-fired power plants represent the nation's largest source of carbon dioxide
- CO₂, the main heat trapping gas causing climate change.
- How do we change? We end the operation of coal-fired plants sooner than later and how do we stop new coal and gas plants?

Our Water & Climate Change



- Higher temperatures will increase water demands
- Increasing drought (duration/intensity)
- Decreasing precipitation
- Increasing severity of wet periods and floods
- Decrease aquifer recharge

Transition

Policy Levels:

Commercial

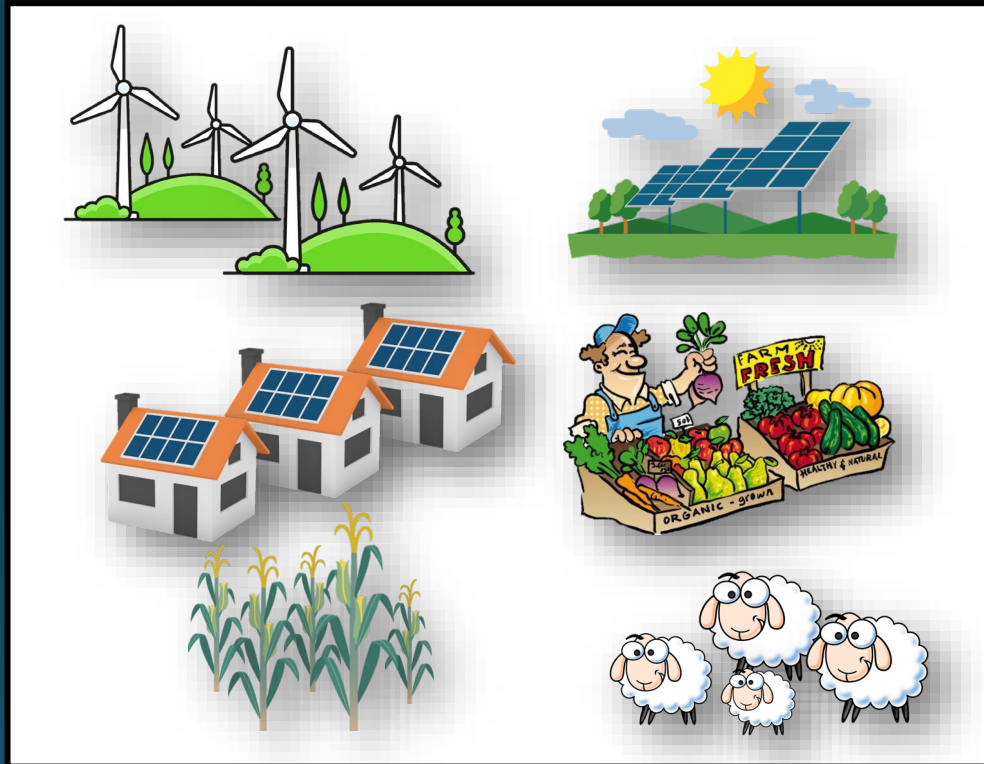
- Partnership structures
- Permitting
- Community benefits

Community

- Net metering
- Access to grid

Individual

- Meat to market
- Access to market



Transition Levels:

Commercial

- Wind & Solar Projects

Community

- Energy &
- Food Co-ops

Individual

- Local and Food Sovereignty

Stay Connected



Tonizhoniani.org

Follow us on social
media

[@tonizhoniani](https://www.instagram.com/tonizhoniani)

Resources:

- Drawdown: Groundwater mining on Black Mesa, NRDC 2000
- Drawdown: An update on groundwater mining on Black Mesa, NRDC. 2006.
<https://www.nrdc.org/sites/default/files/draw.pdf>
- Black Mesa Monitoring Program, USGS, 2000 – 2020 (Report nearly every year)
- Groundwater, Surface-Water, and Water-Chemistry Data, Black Mesa Area, Northeastern Arizona – 2013-2015, USGS 2017
- The Black Mesa Case Study: A postaudit and pathology of coal energy groundwater exploitation in the Hopi and Diné land, Higgins, Daniel 2010
<https://repository.arizona.edu/handle/10150/196061>
- Zhu, Chen. (2000). Estimate of recharge from radiocarbon dating of groundwater and numerical flow and transport modeling. Water Resources Research - WATER RESOUR RES. 36. 2607-2620. 10.1029/2000WR900172.
- Stories and experiences of Diné elders on Black Mesa

Ahéhee'
Thank you

Albuquerque's Campaign for Fare Free Transit and More Transit Equity (and Mobility Sovereignty)

Network for Public Health Law



Be Brotherly.

Why does Together for Brothers Organize for Transit Equity?



- Together for Brothers started during the summer of 2015
- We work to build capacity in boys and young men of color (BYMOC) to become leaders in their communities
- T4B completed a health impact assessment (HIA) about transportation from 2017-2018
- All of what we pursue as an organization is informed and planned by participating youth from “most impacted” and “systems impacted” communities



Be Brotherly.

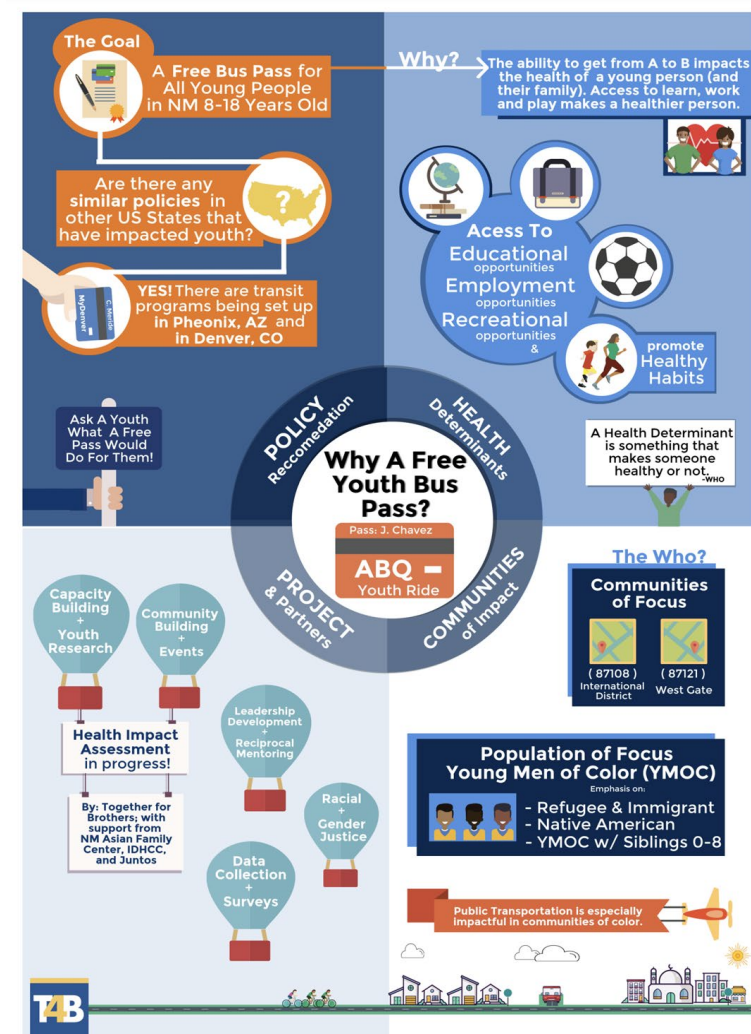
Health Impact Assessment (HIA)

Four Social Determinants of Health:

1. Employment
2. Recreation
3. Education
4. Healthy Habits

Hunting & Gathering and Data Collection:

- Method of data collection
- Finding who is “most impacted”
- Gathering data and reporting



Health Impact Assessment



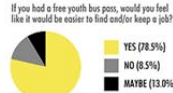
GATHERING DATA THAT CONNECTS TRANSIT TO EMPLOYMENT

Missing work and wages is a big topic for the Alameda County Health Department. Nearly one-third (31%) of their surveyed riders said work was the destination most affected by bus service cuts that happened in the County. This employment data is often reflected in cities across the U.S., who have either divested or invested in their local public transportation services.

<http://www.acphd.org/media/308854/tbtransit-hia.pdf>

TOGETHER FOR BROTHERS HIA SURVEY RESULTS SHOWED

Data shows young men of color are at the highest risks of unemployment or underemployment. A core barrier for young men of color to find and keep jobs: lack of reliable transportation. This includes to and from work from school, home, prayer and other places.



Source: Together for Brothers Health Impact Assessment, 2008

YOUNG MAN OF COLOR STORY | Angel Ronquillo

Meet Angel Ronquillo. Angel is a proud youth father who often struggles to both work and go to school to make a better life for his family. He is living in the WestGate community and he drives to his job. He really wants access to public transportation so he and his partner can both have access to a vehicle when needed. It's hard to pay gas, insurance and car payment as a young father supporting his family.



HEALTH OUTCOMES FROM ACCESS TO EMPLOYMENT

Research shows the following changes in health outcomes occur when young people (and all people) get and keep their employment which can be supported from guaranteed access to transportation through policies such as a Universal Youth Bus Pass.

- △ Psychological Health- Efficacy - Competency - Critical Thinking - Sense of Worth - Problem Solving- Broader Horizon
- △ Community Cohesion
- Agency - Connectedness- Healthy Relationships- Strong Networks- Civic Maturity- Intergenerational dialogue



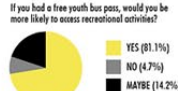
GATHERING DATA THAT CONNECTS TRANSIT TO RECREATION

Tempe, Arizona made a bus pass that is free for youth effective since July 1, 2017. Tempe transit department says that bus passes are not only good for taking trips to school but they are used for every purpose to any destination. Youth are allowed to use their transit pass on weekends, holidays, and even during school breaks. Where they often visit community centers, parks and other recreational resources that otherwise are out of reach.

<http://www.tempe.gov/city-hall/public-works/transportation/youth-transit-pass-program>

TOGETHER FOR BROTHERS HIA SURVEY RESULTS SHOWED

In survey given to young men of color in the most transit dependent communities 81.1% said "yes" that they would be more likely to access recreational activities if they were given a free youth bus pass.



Source: Together for Brothers Health Impact Assessment, 2008

YOUNG MAN OF COLOR STORY | Chris Bora

Meet Chris Bora. Chris is a student at University of New Mexico and soccer player who lives on the West Side of Albuquerque. Chris takes a 40-minute commute (driving) to get to school and back. When on the bus it's over two hours commute for soccer or school. He said, "It was hard for my family before they got me my truck. They were the ones who drove me to practice and back." Chris says that if youth had more access to public transportation it would also make recreational opportunities like playing indoor soccer, going to community centers and more!



HEALTH OUTCOMES FROM ACCESS TO RECREATION

Research shows the following changes in health outcomes occur when young people (and all people) participate in recreational activities which can come from guaranteed access to transportation through policies such as a Universal Youth Bus Pass.

- △ Time Spent Outside
- △ Community Cohesion- Agency-Healthy Relationships- Strong Networks- Civic Maturity- Autonomy
- △ Social Interaction
- △ Psychological Health- Socializing-Increased Alertness-Less Anxiety-Better Concentration- Streets Relief
- △ Healthy Habits



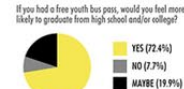
GATHERING DATA THAT CONNECTS TRANSIT TO EDUCATION

"Education is a powerful determinant of both wealth and health." The Alameda County Health Department conducted a study and their research findings show that over half (54%) of all surveyed riders reported being enrolled in school. The vast majority of student riders (89% of 220 riders) reported that they take the bus every day they go to school and back to their homes and/or work.

<http://www.acphd.org/media/308854/tbtransit-hia.pdf>

TOGETHER FOR BROTHERS HIA SURVEY RESULTS SHOWED

72.39% of young men in Albuquerque felt they would be more likely to graduate if they had a bus pass. Currently young men of color have the lowest high school graduation rate in Albuquerque.



Source: Together for Brothers Health Impact Assessment, 2008

YOUNG MAN OF COLOR STORY | Mohdi Hossaini

Meet Mohdi Hossaini. Mohdi is a young refugee man who attends school in the International District. Mohdi relies on public transportation on a daily basis to get to and from school as well as other educational opportunities such as martial arts classes and tutoring. Mohdi says he and young people like him can greatly benefit from a free youth bus pass in Albuquerque. There are not always enough vehicles at home for Mohdi and his family. He will often ask or look for bus money, which isn't always available for a large family like his who is still settling into his new home here in New Mexico. Better access would mean barriers to educational opportunities come down and it increases his chances for success.



HEALTH OUTCOMES FROM ACCESS TO EDUCATION

Research shows the following changes in health outcomes occur when young people (and all people) participate in educational opportunities from gaining guaranteed access to transportation through policies such as a Universal Youth Bus Pass.

- △ Socialization
- △ Psychological Health- Healthy Self Talk- Critical Thinking- Stress Management- Emotional Intelligence- Positive Attitude
- △ Mental Activity
- △ Healthy Habits
- △ Physical Activity
- △ Increased Mobility
- △ Self-efficacy



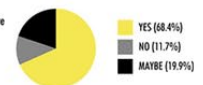
GATHERING DATA THAT CONNECTS TRANSIT TO HEALTH

A health impact assessment conducted by the Alameda County Public Health Department in California found that over one quarter (28%) of the people they surveyed reported less social activity after the bus service cut. They also found higher reports of overall stress among citizens who experienced longer bus waits.

Source: <http://www.acphd.org/media/308854/tbtransit-hia.pdf>

TOGETHER FOR BROTHERS HIA SURVEY RESULTS SHOWED

68% of young men in Albuquerque would be more likely to participate and engage more in their neighborhood with guaranteed access to public transportation.



Source: Together for Brothers Health Impact Assessment, 2008

YOUNG MAN OF COLOR STORY | Ian Lost

Meet Ian Lost. Ian is a young Japanese man who lives in the International District of Albuquerque. Ian has limited access to a vehicle and walks or bikes to the places he learns, plays, prays and works. Having a bus pass means he can get to his destination quicker. As a greater outcome Ian not only is physically active he can lower his stress and socialize more while being on the bus.



HEALTH OUTCOMES FROM PRACTICING HEALTHY HABITS

Research shows the following changes in health outcomes occur when young people (and all people) practice healthy habits from gaining guaranteed access to transportation through policies such as a Universal Youth Bus Pass.

- △ Socialization
- △ Psychological Health- Healthy Self Talk- Stress Management- Emotional Intelligence- Positive Attitude
- △ Mental Activity- Critical Thinking
- △ Healthy Habits
- △ Physical Activity
- △ Physical Health- Weight Control - Healthy Heart System- Increased Mobility - Blood Sugar Control - Restful Sleep/ULTRASOUND





Transit Equity Day

- ABQ Ride free in 2019/2020/2021
- Transit Advisory Board and ParaTransit Advisory Board supporting Transit Equity Day & Zero Fares
- On Transit Equity Day 2021, we organized to get free bus passes for veterans, seniors, and students **year round**

Zero Fares

- In 2019 and 2020 city council voted “in favor” of free transit (without any budget allocation)
- May 2021, city council voted in favor of the Zero Fares (ZF) with \$3 million for one year pilot
 - Due to resistance, opposition made them vote again in August
- August 2021, city council voted **again** in favor of the ZF Pilot Program
 - ZF Pilot Program to last between January 2 to December 3, 2022
- T4B funded by Energy Foundation and More Mobility No Tailpipe (MMNT)
 - Transformation of Albuquerque Transit Equity & Community Safety Working Group to ABRU (Albuquerque Bus Riders Union)
 - Zero Fares Coalition co-led by The Wilderness Society
 - Zero Fares Survey collection
- May 2022, Zero Fares extended to June 2023 with \$1.5 million



Be Brotherly.

What's Next?

- Zero Fares alone is not Transit Equity, but a better step toward equality
 - Making ZF **permanent** on city budget
 - **Mobility Sovereignty** – equity is most impacted communities getting what they need, sovereignty is most impacted communities self-determining their transit and being at the decision making tables
 - **Clean transit** and environmental sustainability with electric buses and vans as well as biking, mobility for people with disabilities and walking
 - **Frequency** of routes (in most impacted communities)
 - Development of **routes** (in most impacted communities)
 - **Community Safety**, including promoting de-escalation and intervention (and discouraging more police or security) on buses and bus stops (without criminalizing people experiencing homelessness or Black and Native communities)



Be Brotherly.

Things To Check Out On Your Own

Our website: www.togetherforbrothers.org

HIA Toolkit: <https://www.togetherforbrothers.org/hia-toolkit>

Videos made by and featuring our brothers for the HIA: <https://vimeo.com/t4b>

ABQ's Transit Equity Day Declaration:

<https://www.cabq.gov/transit/documents/tab-transit-equity-day-resolution-2-2-21.pdf>

Albuquerque Community Safety



Be Brotherly.

Document: <https://www.cabq.gov/acs>

The land is ours: lessons from EJ communities on displacement, gentrification and segregation in times of Climate Action.

Carlos Claussell (he/him/el)

Senior Program Officer, ISC

Commissioner, Philadelphia's EJ Advisory Commission

2022 Climate Justice Design Fellow, Harvard

Cano Martin Pena, SJ, PR:

EJ communities in El Cano Martin Pena suffered from a “criollo” version of redlining in Puerto Rico. The reality for aEJ communities is that either they accept their “sacrifice zone” condition or, if seeking public resources to address environmental racism and health threats impacting their neighborhoods, they will be displaced as a result of any institutional action. There are countless examples of this.

In the case of the Cano Martin Pena, the communities fought back. These are highlights of lessons learned from these communities.

This aerial photograph shows a dense urban landscape. The majority of the area is covered by small, closely packed houses with light-colored roofs. Interspersed among the buildings are numerous green trees, including palm trees, which provide shade and vegetation. The layout of the houses suggests a high population density in a tropical or subtropical environment.



- 8 communities of 25,000 residents in a historically excluded community.
- CMP channel is a flood zone and a public health hazard due to CSO, part of the San Juan Bay Tropical Estuary (SJBTE)
- Internal migration from the countryside to urban areas resulted in informal settlements.

Community-led organizing, advocacy and planning



Threats and challenges

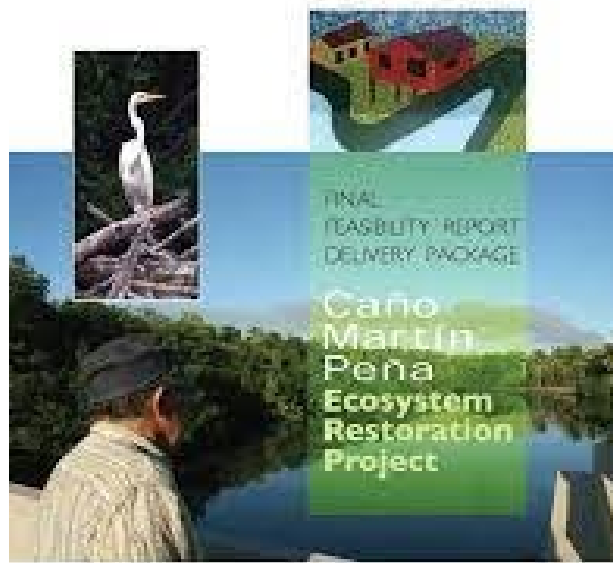
- Displacement of communities to impose a government-led development plan
- Water-borne and vector-borne diseases
- Housing insecurity
- Further marginalization and segregation of low-income, low-wealth black and brown communities

Strategies and Action

- Develop a policy advocacy strategy engaging elected officials and candidates
- Establish key partnerships with stakeholders, influential people and work with SME
- Co-sponsor legislation to secure land access and to enforce government accountability
- Develop a Comprehensive Development Plan for the neighborhood (Special District)
- **Establish the world's first informal settlement turned CLT**

CMP Comprehensive Development Plan & Ecosystem Restoration Project

- \$2B investment in infrastructure, ecosystem restoration, community-led reallocation of families, economic development opportunities (\$250M ecosystem restoration project)



20 years of community-led advocacy and holding government accountable



NEWSROOM / PRESS

SCHUMER, VELÁZQUEZ ANNOUNCE \$163 MILLION FOR RESTORATION OF CAÑO MARTÍN PEÑA IN PUERTO RICO

January 19, 2022

Following years of inaction by the Trump Administration, the Senate Leader and New York Representative secured this historic funding as part of the Biden's Administration enactment of the Infrastructure Investment and Jobs Act



Thoughts on the CMP experience:

- EJ communities are unified by a common threat/issue, that issue needs to lead the conversation always.
- Land access and land rights are at the core of environmental and climate justice. Addressing land use policy is key.
- Unless EJ communities are considered true stakeholders, are part of the planning and decision making process and have tools to enforce accountability, policy efforts to address environmental racism and public health issues can't guarantee that these communities will be better off.
- Public investment and funding moves “faster” when there are private interests and established stakeholders involved, therefore working with EJ communities to build strategic partnerships that increase their ability to influence decision-makers is instrumental.
- A big part of the brainstorming and strategic planning was spent anticipating “others” actions to minimize the work being done by EJ communities. A scenario planning system of sorts.
- We need to think more about **Blue-lining** and what it means.

Thank you for attending

For information about future webinars, please visit
networkforphl.org/webinars