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# FUTURES GROUP

DIALOGUE. COLLABORATION. KNOWLEDGE-SHARING.

# Equitable and Sustainable Regional Infrastructure Roundtable

March 12, 2021

# Agenda

- Welcome and Introductions
- The Temporality & Geography of Equity, Dr. Kafui Attah
- Summary of Temple Workshop:
  - ◆ How Does Infrastructure Shape Equity and Well-being across the Urban-Rural Gradient?
- Facilitated Exercise
- Report Back
- Member Updates

# Meeting Goal

- Connect with people across the region who aren't researchers and understand what their interest in infrastructure is.
- The aim is to use more understanding what people are currently doing and thinking to consider how this interfaces with equity issues.

# Key Definitions

- **Equity** - the just and fair structuring of society where everyone can participate, prosper, and reach their full potential; including extensive, reparative, and accessible civic dialogue and engagement that gives everyone a meaningful voice in public decision-making processes, with a particular focus on communities that have historically been marginalized and disenfranchised.

# Key Definitions

- **Infrastructure** - a substructure or underlying foundation; especially, the basic installations and facilities on which the continuance and growth of a community or state depend on, such as roads, schools, power plants, transportation and communication systems, and others.

[Adapted from: Collins English Dictionary]

# The Temporality and Geography of Equity

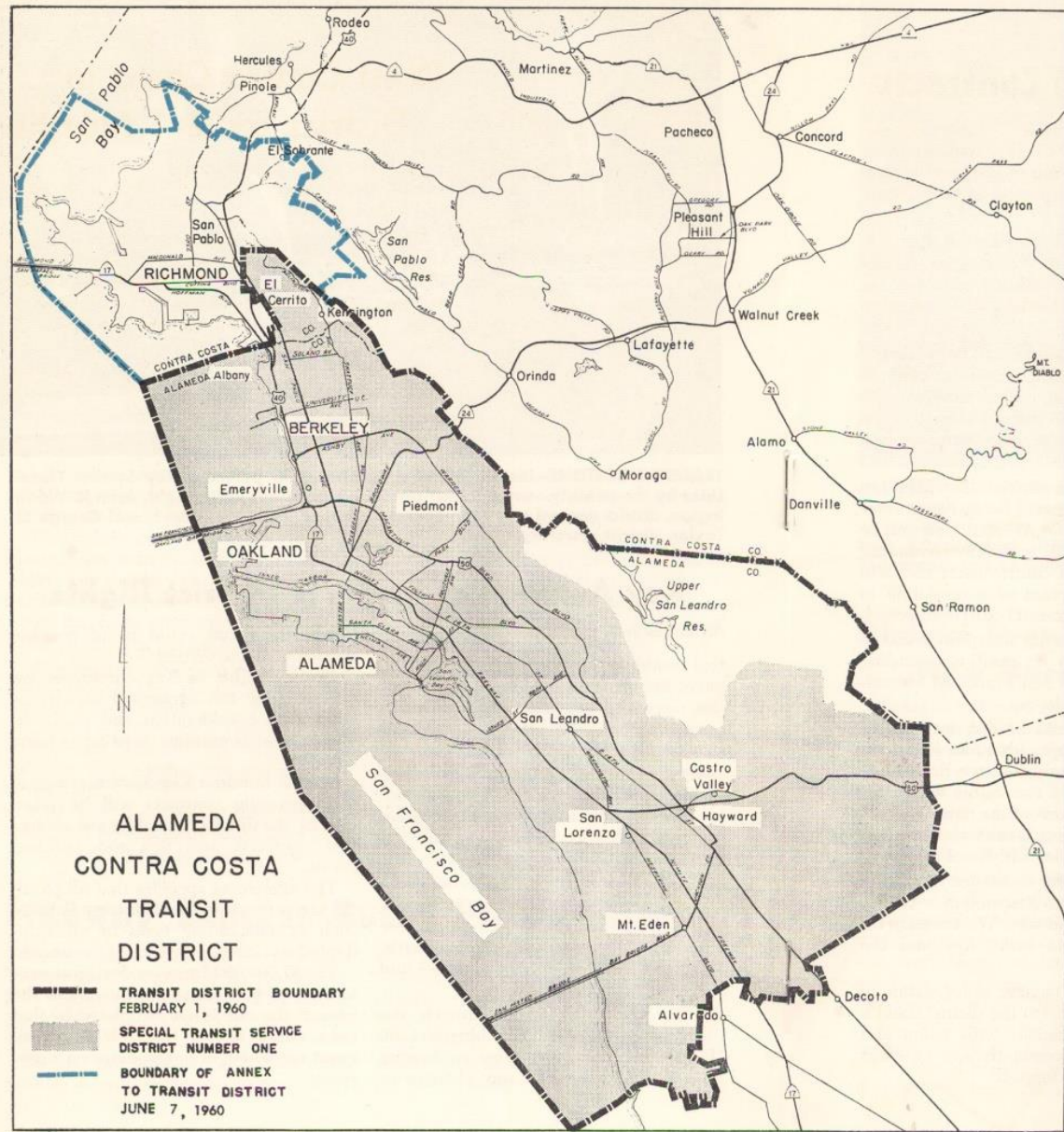
## **Kafui Attoh, PHD**

Assistant Professor of Urban Studies

Joseph S. Murphy Institute for  
Worker Education and Labor Studies

CUNY's School of Professional  
Studies.

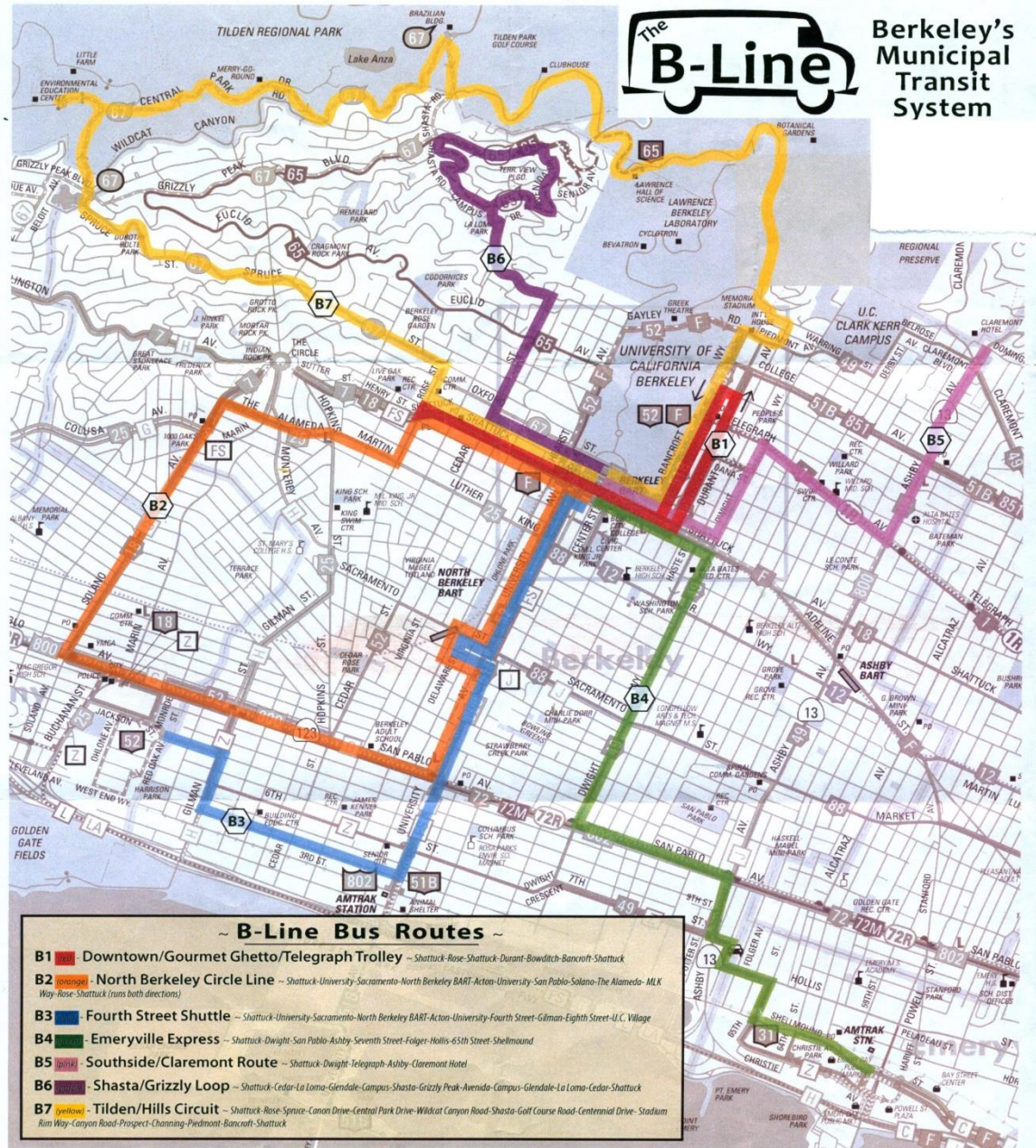




Map courtesy of Ron Hook from Transit Times June 1960



# Berkeley's Municipal Transit System





## Who will benefit from the B-Line?

EVERYBODY!

- Existing bus riders will get vastly improved service, with buses going exactly where we want them to go, more frequently and less expensively than with AC Transit.
- Any Berkeley residents who currently use cars for commuting, shopping, etc., and who would *like* to use public transit instead of driving, but can't make the switch because the current AC Transit service is unreliable and insufficient.
- Berkeley business owners, who will benefit from more locals and out-of-towners arriving in the city's various shopping districts without having to hassle with parking.
- Tourists, especially those arriving by BART, who will finally have a way to reach various attractions and shopping areas easily and quickly.
- U.C. Berkeley students, who will be able to get to campus more conveniently from housing in other parts of town.
- Disabled, senior, youth and disadvantaged residents, and anyone who doesn't drive a car.
- The city as a whole, because a new transit system will improve our reputation as a center for green innovation.
- THE EARTH, which will thank us for decreasing air pollution and oil usage.

<http://berkeleytransit.wordpress.com/>



Why doesn't the greenest city in America have its own eco-friendly transit system?

The B-Line is a dream come true for Berkeley residents: our very own municipal buses!

The time has come for us, the residents of Berkeley, to set up our own transit system — a modest fleet of electric (or other green-friendly) small buses or trolleys running throughout the city on a network of routes designed with riders' needs in mind.

The B-Line does not exist yet — but with your help and enthusiasm, it will.

### *Proposed routes*

The routes shown on this B-Line map are not set in stone: They are simply a first draft, seven possible proposed routes customized to the needs of Berkeley residents. Have ideas for better routes? We'd love to hear them!

### *How can I help?*

Visit <http://berkeleytransit.wordpress.com> or email [berkeleytransit@gmail.com](mailto:berkeleytransit@gmail.com) to get started, and for all sorts of resources to help you transform this proposal into reality -- and to transform Berkeley into the public transit paradise it deserves to be.

<http://berkeleytransit.wordpress.com/>

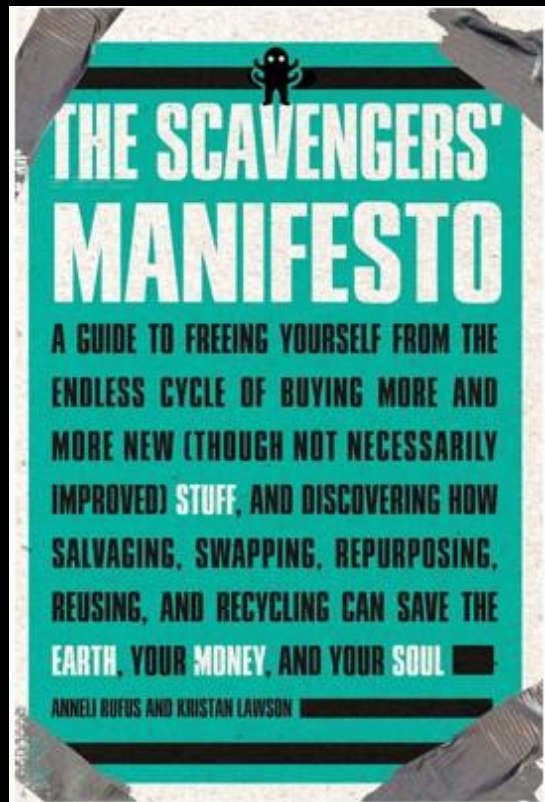


## Berkeley's Municipal Transit System

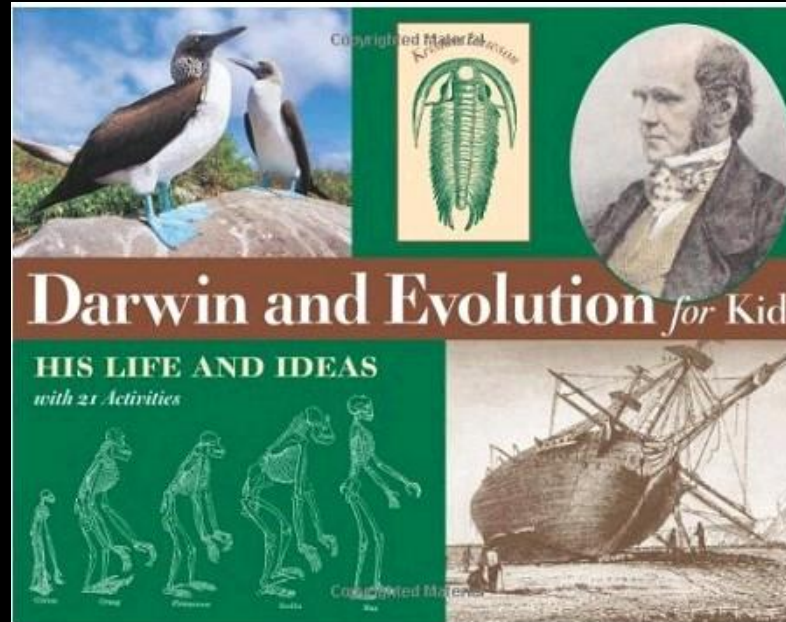
# Proposed Route Map

October 25, 2010

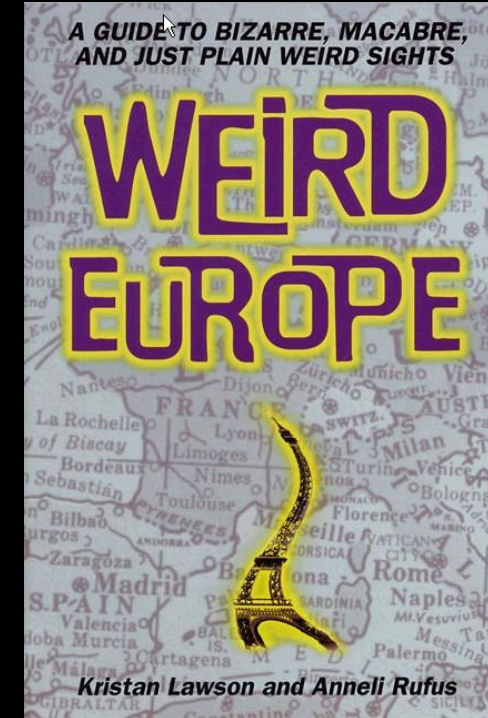
<http://berkeleytransit.wordpress.com/>



<http://www.amazon.com/Scavengers-Manifesto-Anneli-Rufus/dp/B002SB8OXY>



<http://www.amazon.com/Darwin-Evolution-Kids-Ideas-Activities/dp/1556525028>



<http://www.amazon.com/Weird-Europe-Bizarre-Macabre-Sights/dp/0312198736>

“It’s 100% a dream, there’s no reality to it, it may look like it’s official, but that’s because I am very good at making things look official, but all it is, is one lunatic -- that’s me -- coming up with the idea, making a whole route map, designing it as if it were a real bus system and then just announcing that it’s real [...]. If enough people assume that it’s real-- then it becomes real -- that’s how things happen in the world.”

Kristan Lawson 12/7/2010

“So I said, ‘**why doesn’t someone make a better bus system**’ and I am one of these entrepreneurial people and I said ‘**why don’t I make a better bus system,**’ and so I took the bull by the horns.”

Kristan Lawson 12/7/2010

“I understand that everyone is going to come out and say “this [should] go there” and “this line is stupid” or “my house is there” and everyone is going to argue. I don’t care about the details. I just wanted to get it going. And if you all want to wrestle about the details or how it’s funded, fine. Wrestle away. If the City of Berkeley says we’ll give \$20 million to make the B-Line a reality, then great; throw away my idea about it being privately financed. I was just trying to come up with alternatives.”

Kristan Lawson 12/7/2010

“The problem is that in Berkeley and probably other places, transit becomes politics. Everything gets intertwined with all these political agendas, and I just wanted to stay away from that. . . . I’m not doing this for transit justice. . . .

Kristan Lawson 12/7/2010

When people say “social justice,” it’s just a euphemism. They don’t really want universal bus coverage, they want it as, like, an implement of the revolution. They want to drain the coffers of the privileged and give it to the underprivileged for some revolutionary purposes. ... that’s not what I’m talking about here. I’m saying to everyone, “If we make the bus system universally applicable, then everybody will want to take it equally, and it will achieve universal equality and universal diversity, since everyone will be taking the same transit system. Isn’t that what we all want?”

Kristan Lawson 12/7/2010





# Michigan man who walks 21 miles to work given new car

By | Fox News



More from Fox News



Co  
Co  
Fox



## Over 100 Million Americans Have Auto Loans

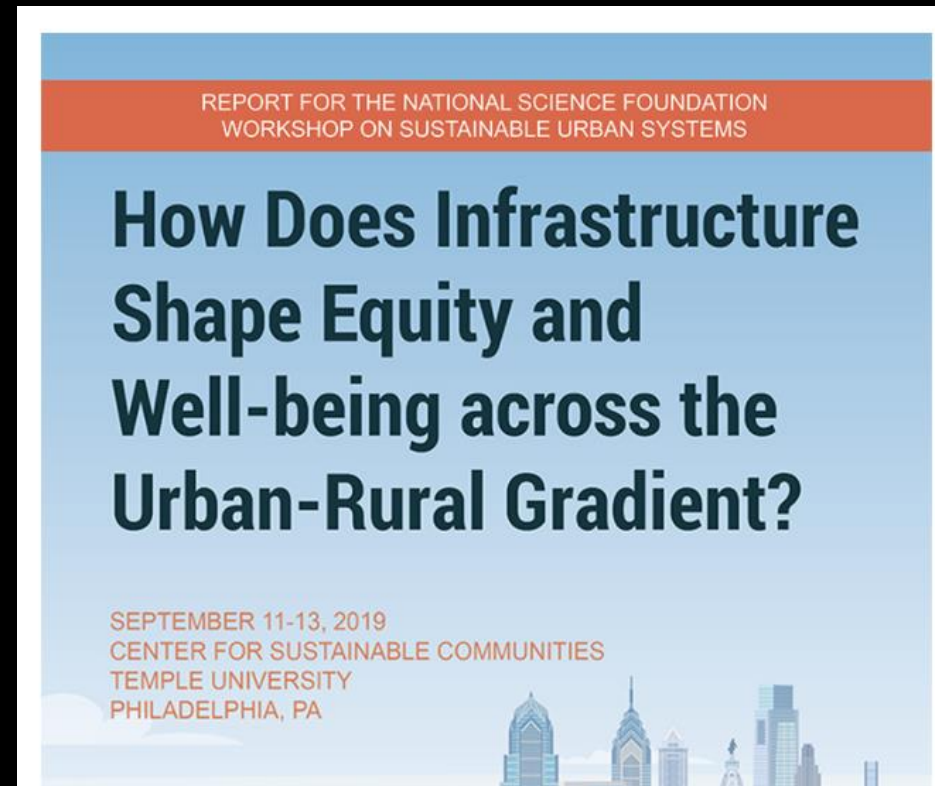
Number of car loan accounts in the U.S. by year (millions)



@StatistaCharts Source: Federal Reserve Bank of New York via Finder

Forbes statista

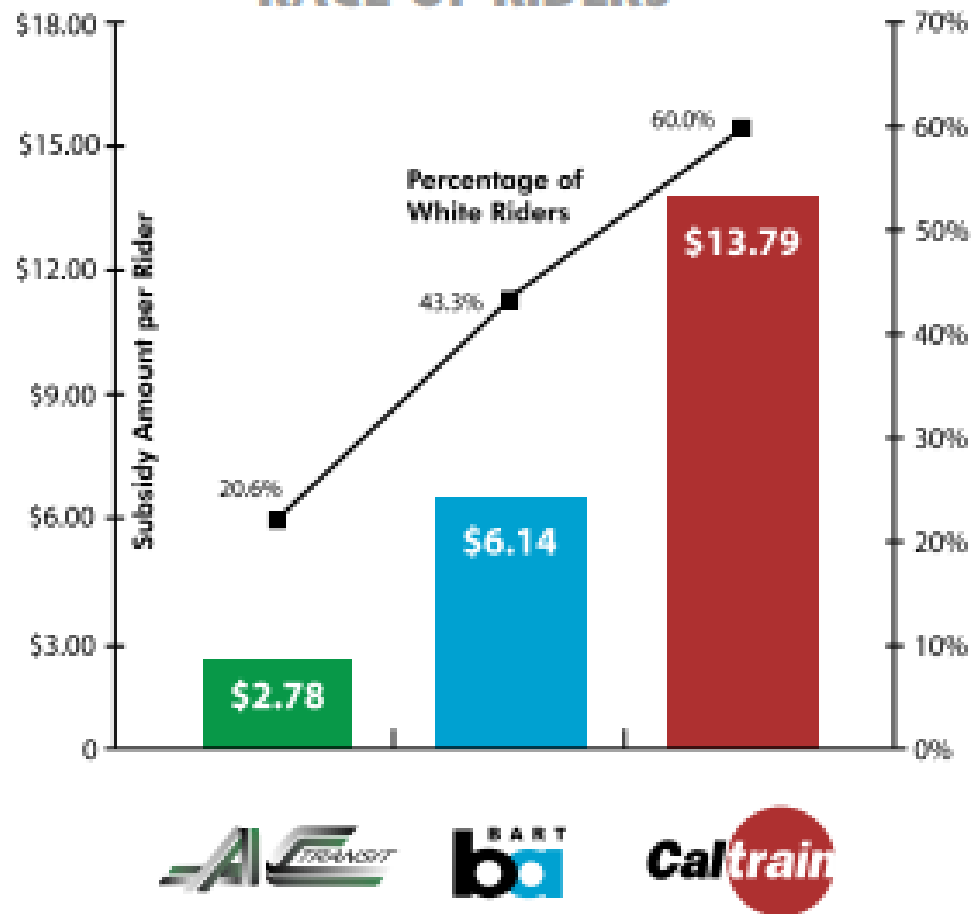
# What kind of politics, for what kind of infrastructure?





Chronicle / Michael Macor

## PUBLIC SUBSIDIES AND RACE OF RIDERS



Data from the National Transit Database, 1989-2003

(1) In general.--The metropolitan planning process for a metropolitan planning area under this section shall provide for consideration of projects and strategies that will--

(A) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

(B) increase the safety of the transportation system for motorized and nonmotorized users;

(C) increase the security of the transportation system for motorized and nonmotorized users;

(D) increase the accessibility and mobility of people and for freight;

(E) protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

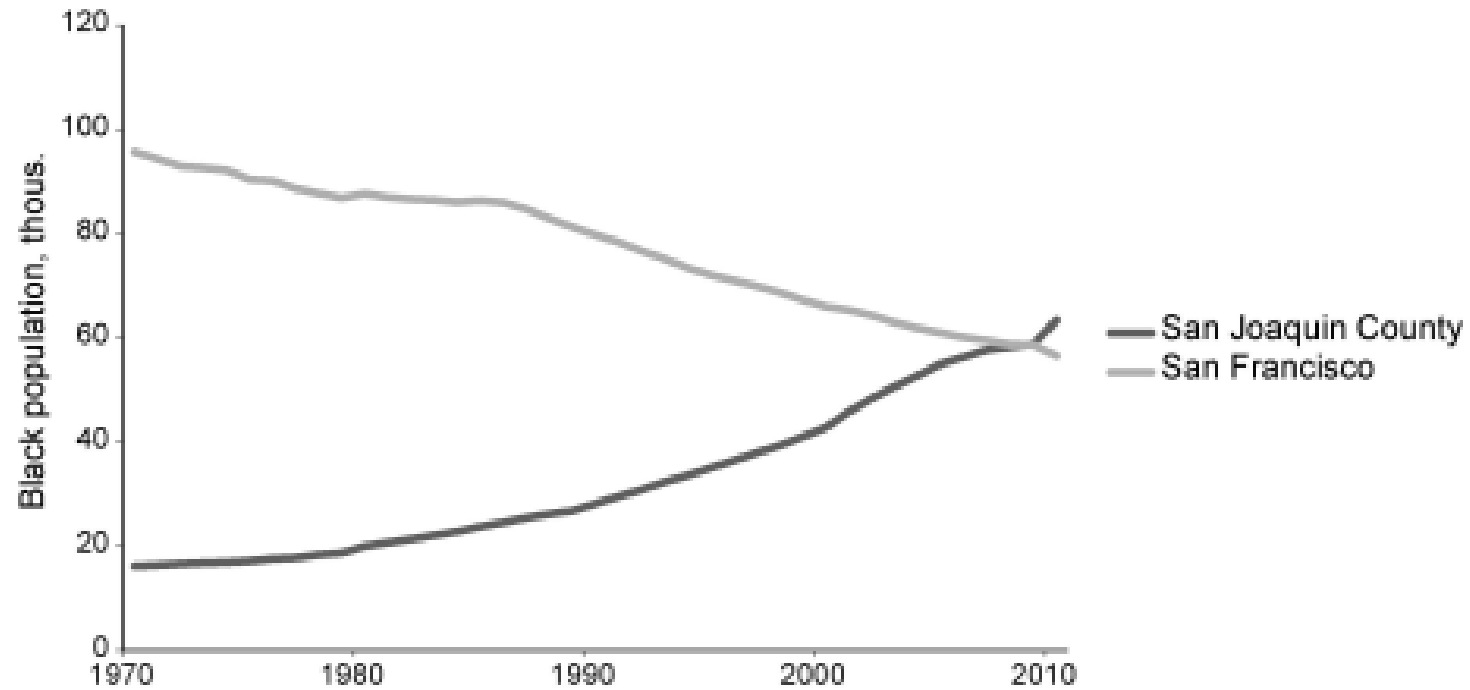
(F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

(G) promote efficient system management and operation; and

(H) emphasize the preservation of the existing transportation system.

[In the Bay Area ] an individual bigot may be found, perhaps even pockets of racists. The notion of a Bay Area board bent on racist goals is a specter that only desperate litigation could entertain

Judge John Noonan, *Darensburb v. MTC*, 2011



**Fig. 2.** African Americans in San Francisco and San Joaquin counties, 1970–2010. *Source:* U.S. Census of Population and Housing (1970, 1980, 1990, 2000, and 2010).

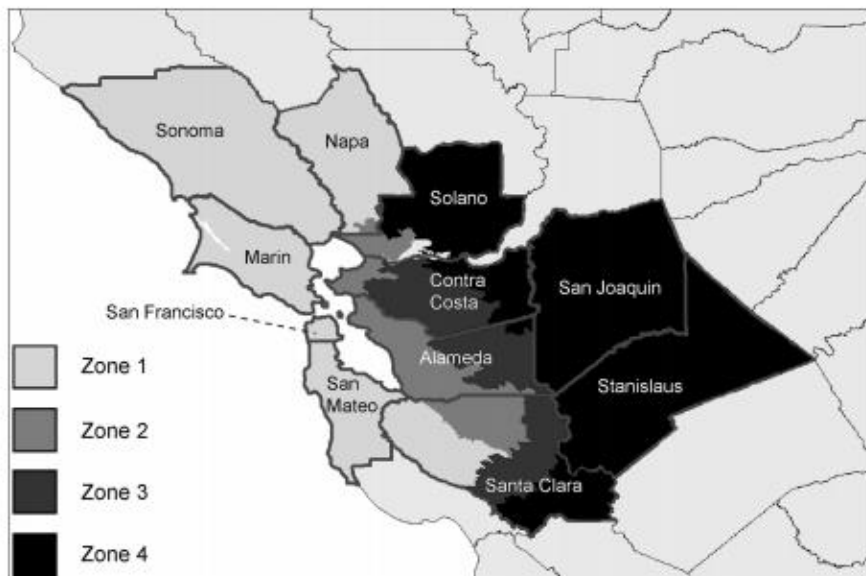


Fig. 6. The San Francisco Bay Area (11-county definition) in four zones.

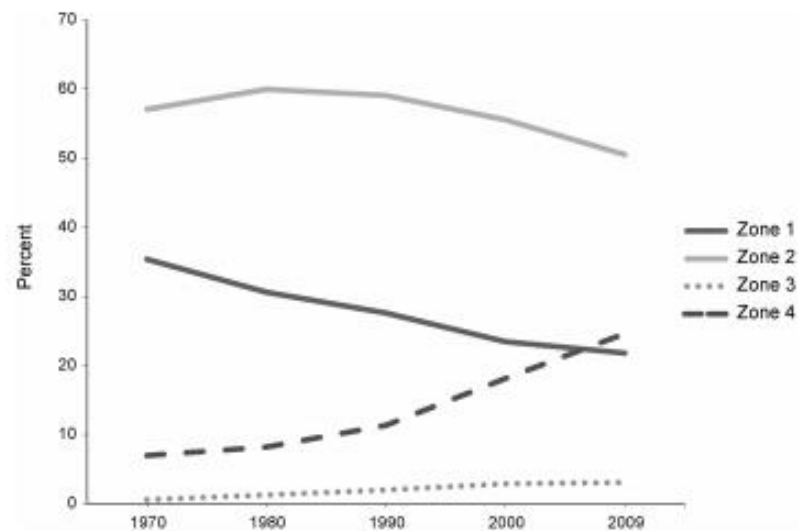


Fig. 7. Percentage of Bay's Area's African American population by zone, 1970-2009. Source: U.S. Census of Population and Housing (1970, 1980, 1990, and 2000) and American Community Survey (U.S. Bureau of the Census, 2005-2009).

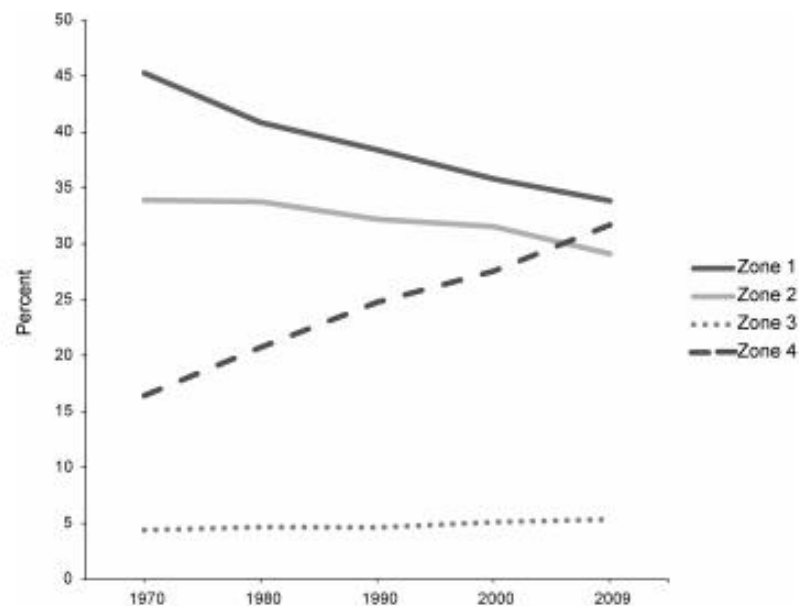


Fig. 8. Percentage of Bay Area's Hispanic population by zone, 1970-2009. Source: U.S. Census of Population and Housing (1970, 1980, 1990, and 2000) and American Community Survey (U.S. Bureau of the Census, 2005-2009).



POLITICS FEATURE DECEMBER 25, 2000 ISSUE

# Back to the Back of the Bus

*Montgomery's transit system isn't segregated anymore. It barely exists.*



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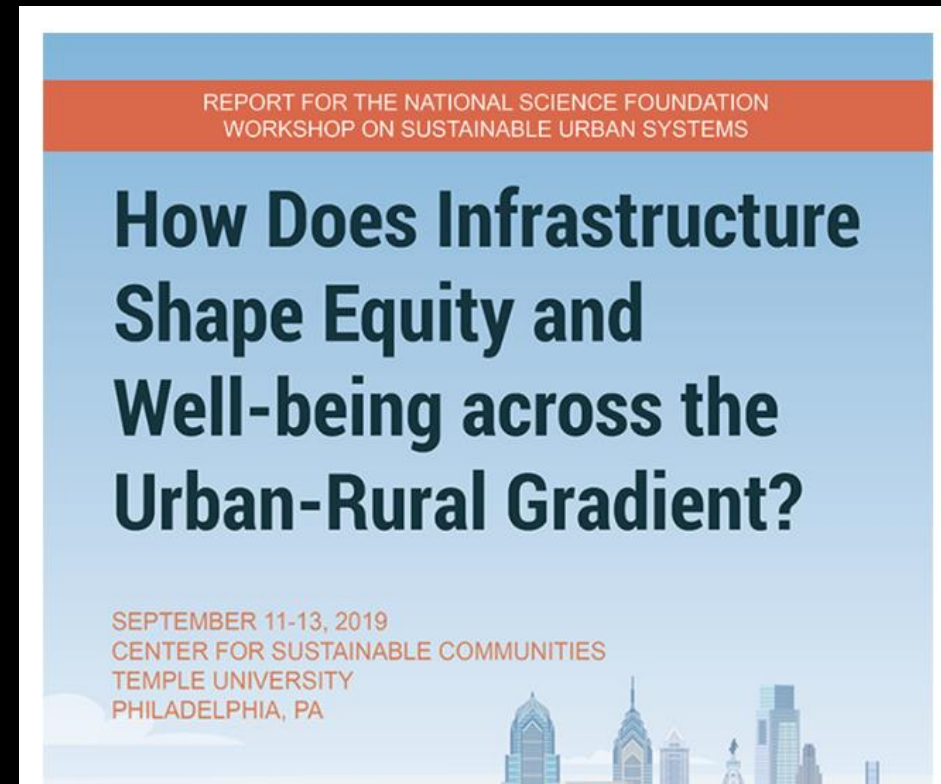
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# What kind of politics, for what kind of infrastructure?



# Infrastructure, Equity, and the Urban-Rural Gradient



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## How Does Infrastructure Shape Equity and Well-being across the Urban-Rural Gradient?

This 2019 NSF sponsored workshop generated critical transdisciplinary research questions on Sustainable Urban Systems by bringing together community organizations, non-profits, industry, the academy, and the government to develop a research agenda based on finding real world solutions to pressing sustainability challenges.



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# How Does Infrastructure Shape Equity and Well-being across the Urban-Rural Gradient?

SEPTEMBER 11-13, 2019  
CENTER FOR SUSTAINABLE COMMUNITIES  
TEMPLE UNIVERSITY  
PHILADELPHIA, PA



## DVRPC Equitable and Sustainable Regional Infrastructure Roundtable

March 12, 2021

Melissa R. Gilbert  
Hamil Pearsall  
Tina Rosan

Center for Sustainable Communities  
Geography and Urban Studies  
Temple University

This research was supported by the National  
Science Foundation Award #1929834

# Background and context

In September 2019, Temple's Center for Sustainable Communities hosted a workshop funded by the National Science Foundation

- workshop addressed the **impact of infrastructure on equity and well-being across the urban-rural gradient** through a case study of the Philadelphia metropolitan region
- 68 participants representing a **range of disciplines**, including the social, engineering, health, data and environmental sciences, **and sectors**, including researchers, practitioners, industry leaders, government agencies, educators, journalists, and community organizers
- Explored how the integration of sets of knowledge and skills across diverse perspectives can develop a **sustainability science oriented towards actionable solutions**
- The workshop consisted of **talks from researchers, practitioners, and policy makers**, as well as structured breakout sessions.

# Outcomes of the workshop

- Identify methodological challenges and data gaps, and develop new conceptual frameworks and research questions for a **convergence science of equity and well-being** for sustainable urban systems (SUS) across the urban-rural gradient;
- Identify challenges and develop **new models of co-production of actionable knowledge** for SUS; and
- Determine the **scalability** of the conceptual frameworks developed in the Philadelphia metropolitan area to other cities and regions in the US and globally.

# Key themes

- Sustainable Infrastructure (Dr. Simi Hoque, Drexel University)
  - infrastructures that support living well with minimal harm to the environment, with attention to how infrastructure shapes urban and non-urban areas and ensuring that urban infrastructure extends to rural areas
- Equity (Dr. Hallie Eakin, Arizona State University)
  - Distributive, procedural, and recognition justice; importance of recognizing non-expert knowledges, perspectives and values as a foundation for equitable processes.
- Health and well-being (Dr. Gina South, University of Pennsylvania)
  - Need to center health and well-being in infrastructure planning
- Urban-rural gradient (Dr. Eduardo Brondizio, University of Indiana)
  - Looking at the interdependencies across urban and rural areas, proximate and distal
- Co-production of knowledge (Dr. Lara Roman, USFS)
  - What institutional arrangements facilitate knowledge co-production, how to include stakeholders and marginalized populations without burdening them (time, resources, etc.)?



# Key knowledge gaps

1. How to manage uncertainty associated with the future of infrastructure development?
2. How to quantify direct and indirect impacts of infrastructure development?
3. What are the best governance tools to plan for equitable sustainable infrastructure?
4. What are the best methodological pathways for investigating health and well-being in the context of the urban-rural gradient?
5. Which models of co-production are most appropriate for specific situations and contexts?
6. How to characterize historical and emerging challenges and opportunities in the governance of urban-rural relationships?

# Recurring topics of discussion

- How to create and evaluate models for knowledge co-production
- How to meaningfully prioritize equity and wellbeing in sustainability research and planning
- How to incorporate an analysis of health outcomes, disparities and impacts into infrastructure research
- How to understand connections across urban and rural places
- How to compare infrastructure systems across regions

# Deliverables

We have developed the following deliverables to continue to advance this work:

- [Community report](#) on workshop outcomes posted on Temple's Center for Sustainable Communities website
- Academic articles (*npj Urban Sustainability*, *Current Opinion in Environmental Sustainability*)
- A public broadcast and [podcast](#) about the process and outcomes of the workshop on the radio show Planet Philadelphia
- Presentations with the the Delaware Valley Regional Planning Commission's groups

# Discussion Question 1

What does an equitable region look like?  
How are you thinking about infrastructure  
and equity at the regional scale and beyond?

# Discussion Question 2a

How can we use investments in climate resiliency and infrastructure to undo institutional and structural racism?

# Discussion Question 2b

How do we overcome disconnects between the city and the surrounding suburbs?

# Discussion Question 2c

What policies can be put in place to anticipate future challenges to equity (such as advances in technology, climate change, global competition, pandemics, and others)? Is this going to be fair in 20 years? Or what are the policies that can help make it fair in 20 years?

# Discussion Question 3

How would we know if we've reached success?  
What would the region look like in 25 years?  
What are the indicators or signposts that can tell us if we have been successful?



# Member Updates

- Please use the **Raise Hand** button at the bottom of the Zoom interface to be called on.
- Or make an announcement in the chat box.



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