

# Unplanned pandemic planning: Lessons learned from rapid COVID street transformations

## CSCRS Project R-34 team:

Tab Combs, PhD

UNC Dept. of City & Regional  
Planning

Krista Nordback, PhD PE

Mike Vann

UNC Highway Safety Research Center

Luke Morin

Kittelson & Associates, Inc.

# Overview



Photo: [pedbikeimages.org](https://pedbikeimages.org/)/Toole Design

## What we did

- Integrated analysis of ped/bike count data coupled with in-depth case studies

## What we hoped to learn

- Do more robust planning processes lead to more successful quick-build shared streets?

## What we actually learned

- The 'COVID-streets' era was chaos
- Cities acted deliberately and carefully despite chaos
- There's a lack of robust, valid, standard data on impacts
- Cities learned a lot and are converting experiences into new practices

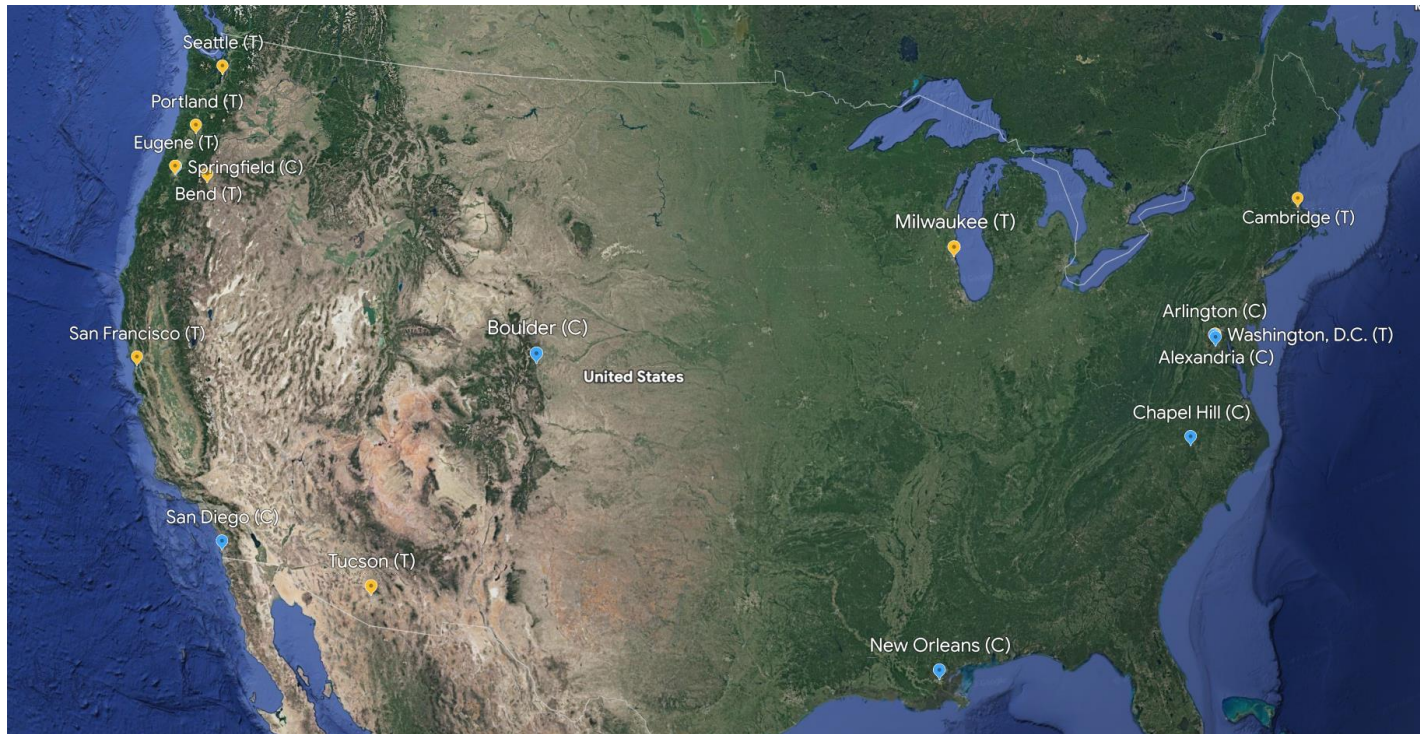
# Site Selection

## Treatment cities (n=9)

- Robust COVID shared streets
- Maps of shared street sites
- Continuous ped/bike counters from pre & during COVID

## Control cities (n=7)

- Similar in size to treatment cities
- Limited COVID-streets responses
- Continuous ped/bike counters from pre & during COVID



# Ped/Bike Counts: Treatment vs. Control

Total counter sites: 195

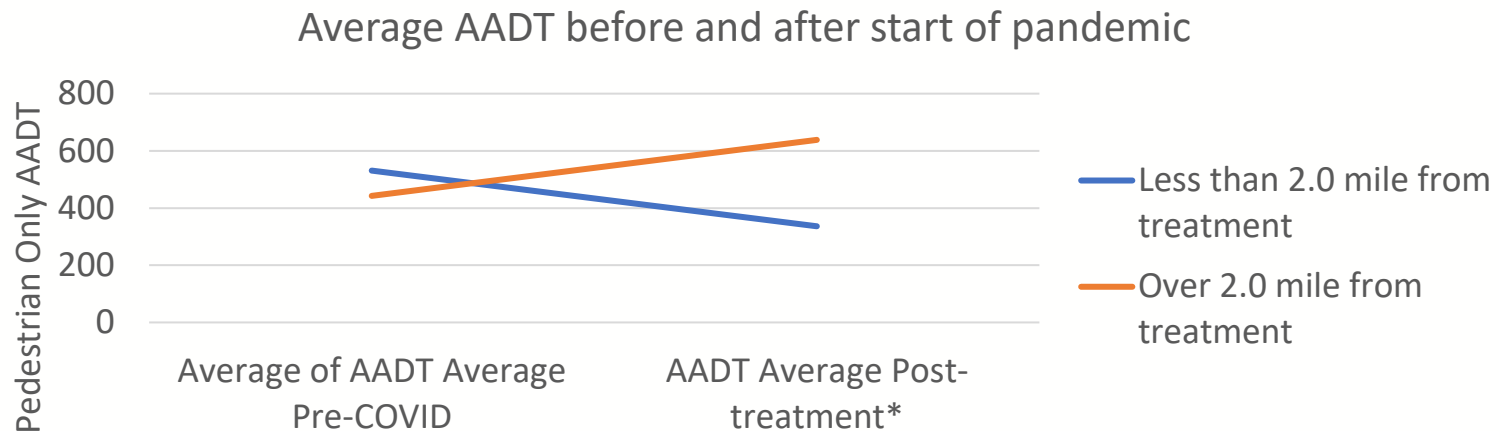
From before to during the pandemic...

- Walking & biking increased in control cities but not treatment cities
- Use shifted overall from commuting to recreation patterns; more pronounced in control cities
- Ped/bike volumes increased in sites with recreation-dominant sites & decreased in commute-dominant sites
- **No significant differences between cities with and without shared streets programs\***

## Ped/bike Counts: Distance to a shared street

Redefined 'treatment' as < 2 miles from a shared street

Proximity to a shared street → decreased measured ped/bike counts



Were shared streets pulling people away from the counters?

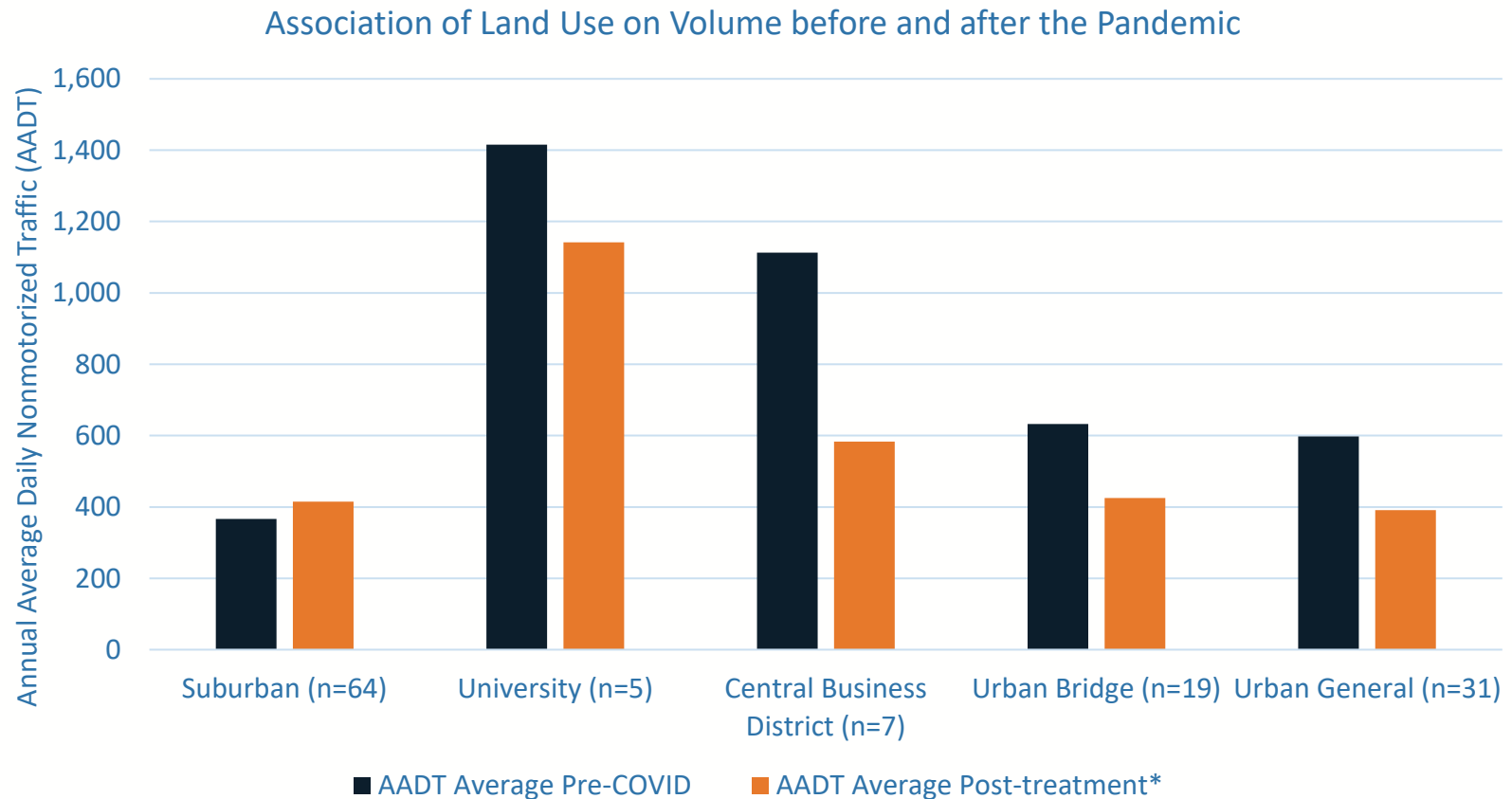
Were counters just in the wrong place?

Were shared streets just not where people wanted to go?

Was it land use?



# Was it land use?



Land use factors associated with shared streets programs may be masking their effects

# Case studies (treatment cities)

What motivated shared streets?

Who was involved in planning, siting, design, implementation?

What was the public's role?

Was it popular?

Is it still around?

What did they learn?

What would they do differently?

What new practices are emerging?



Photo: Jonathan Maus;  
<https://bikeportland.org/2022/02/09/dozens-more-15-mph-shared-streets-popping-up-in-portland-348304>

# Planning processes and people

Efforts led by planning departments, DOTs, & public works

Lots of thought, mental energy, passion

Program leaders deliberately excluded law enforcement

- Did not want 'policed' spaces
- Did want spaces that could be sustained without need for enforcement



Photo: K. Nordback



# Motivations & Locations

## Main motivations:

- Reduce viral transmission
- Keep people connected to destinations
- Fast-track existing plans



## Location criteria:

- Alignment with existing plans
- Ease of implementation
- Traffic conditions
- Equity & justice



Photo: K. Nordback

# Role of the public

Varied widely!

Urgency hindered public process

Circumstances required more robust public processes

Evolution happens



Photo: City of Oakland;

<https://www.oaklandca.gov/projects/archive-oaklands-slow-streets-essential-places-program-during-covid-19>

## Outcomes

Largely positive feedback, but pockets of dissent

6 of the 9 programs became permanent

Of the 3 that expired, 2 had no formal public engagement

# New ways of thinking about streets

New philosophies about street space

Growing appetite for experimentation, creativity, and doing things faster



Photo: pedbikeimages.org/Bruce Bursey

*"This has demonstrated to us that we actually can do things quickly when needed, which is not something...we have been good at doing in the past. [Shared streets] has shown we can be flexible and creative when we need to be."*

*"It is no longer acceptable to make our residents wait years for safer, calmer, lower-stress streets."*

# New standards and regulations

New standards for traffic calming  
Codified use of temporary materials  
Changes to design manuals

*"I was talking to somebody who...went through one of the slow streets, and he paused as he saw the 'local traffic only' sign. He was like, 'I wonder if I'm allowed to bike through here.' [And] I think, especially if you're somebody who doesn't feel comfortable being out on the street...that's not a very welcoming sign unless you live on that street and you know that you can be there."*



Photo: [pedbikeimages.org/Christiaan Abildso](https://pedbikeimages.org/Christiaan%20Abildso)

(The city revised their street design manual's sign section based on this feedback)



# New procedures

## *In situ* testing!

- Trial as analysis
- Trial as education
- Trial as engagement



Photo: pedbikeimages.org/Toole Design

*“...just using the materials we have to show people what different changes could be. We’re working...on an area plan for a neighborhood and people are interested in seeing a sidewalk widened. But that would mean we would have to lose parking. And I’m like, well, let’s just show people for a week. What does that look like? Let’s let people decide if it’s worth it. So just thinking more about how we can show people things in a non-permanent way.”*

*“It’s like almost like a real time experiment on traffic calming for our neighborhood greenways.”*



# New appreciation for engagement

Stronger connections with community members, better communication, new ways to engage

*“It's been good for us to work with community organizations. We haven't in the past really partnered with community organizations in this way. It's been a good way for us to build trust with residents through those partnerships. And we're giving them money. So that's just a really great partnership to have with community organizations and to just interact with them in different ways. It's helped us create more connections for other projects that we might be doing.”*

It's ok to make mistakes (as long as you fix them)

*“...in a lot of the neighborhoods, we were hearing from people like, ‘I don't think this is the solution to what's going on in this neighborhood; this might exacerbate existing issues.’”*

# It doesn't always work

## Context matters

*“You know, before we had a very uniform kind of cookie cutter approach, but as we evolved and kind of, you know, progress the program forward, there's just a lot more possibility. We're finding out, you know, what works, what doesn't work and how you have to shape everything based on communities and just the overall surrounding neighborhood. So, kind of having that ability now will improve slow streets in the future and make them work better for the communities they serve.”*

## Design isn't always enough

*“I think the biggest challenge with the way it was implemented is the need for actual, you know, some combination of regulatory change, to make reduced speeds enforceable or make the no through traffic enforceable.”*

# Planning matters!

Good plans were key to success

Better plans are needed in the future



Photo: pedbikeimages.org/Toole Design

# Data matters!

Cities need structured and intentional evaluation programs, laid out in advance in plans, managed by trained staff!

*“It is hard to get data, much less valid and reliable data, to evaluate the impacts of interventions when you are relying on volunteers to gather that data.”*

# Conclusions

Cities with robust shared streets programs all had relevant plans in place...and used them

Engagement didn't start strong but improved and expanded

Existing count programs likely won't capture impacts – we need a more deliberate approach

The knowledge to support new best practices is already here – but we must work fast to capture it

Thank you