



Watsonville
CALIFORNIA

Netherlands Trip

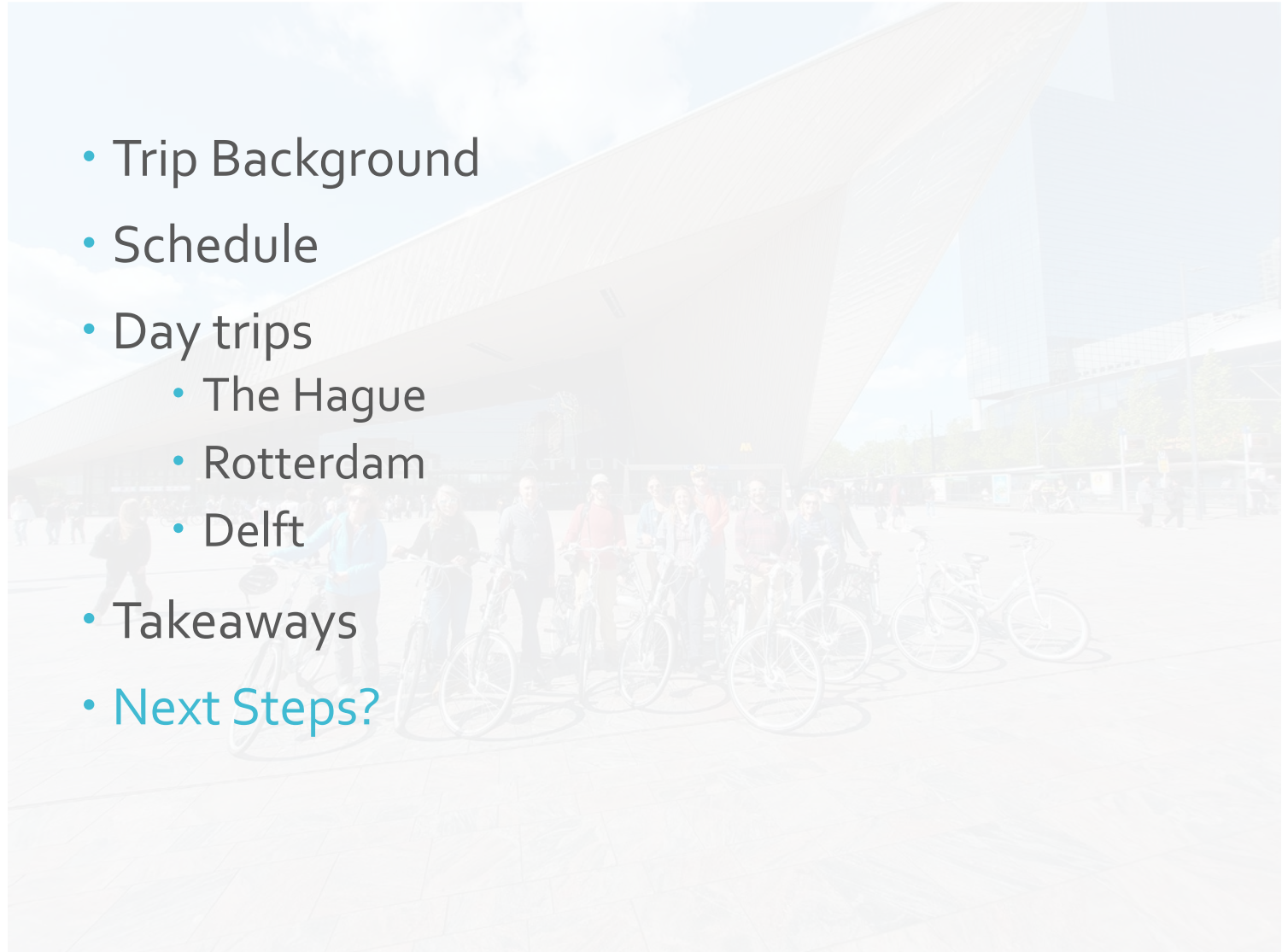
Santa Cruz Group | June 3-6, 2024

Justin Meek, AICP, Asst CDD Director



OVERVIEW

- Trip Background
- Schedule
- Day trips
 - The Hague
 - Rotterdam
 - Delft
- Takeaways
- Next Steps?



Background



Background

- ThinkBike Workshop in 2022
 - DCE, Santa Cruz and the local Gazelle Experience Center started working together.



- Netherlands trip in 2024
 - Santa Cruz and neighboring cities Capitola, Scotts Valley and Watsonville travelled to the Netherlands for a study visit from June 3rd – 6th 2024.

Attendees

Ecology Action

- Jeanne LePage, Strategic Fund Development Director
- Piet Canin, Strategic Development Director
- Matt Miller, Community Bike Program Manager
- Emily Rose Peck, Senior Donor Engagement Officer
- Shelby Cramton, Senior Planner

City of Santa Cruz

- Renee Golder, Vice Mayor
- Matt Huffaker, City Manager
- Nathan Nguyen, Public Works Director
- Matt Starkey, Transportation Manager
- Claire Gallogly, AICP, Transportation Planner
- Dan Estranero, Engineer

Attendees

County of Santa Cruz

- Felipe Hernandez, County Supervisor, District 4
- Kristina Glavis, County Supervisor's Analyst, District 1
- Steve Wiesner, Asst Public Works Director

UCSC

- Dan Henderson, Executive Director, Transportation & Parking Services
- Phil Boutelle, Assoc. Engineer, Physical Planning Development & Operations
- Oxo Slayer, Senior Physical Planner
- Alex Yasbek, Senior Civil Engineer

Regional Agencies

- Amaury Berteaud, Sustainability Program Manager, AMBAG
- Amelia Conlen, Transportation Planner, TAMC
- Thomas Travers, Transportation Planner, SCCRTC

Attendees

City of Capitola

- Yvette Brooks, Vice Mayor
- Kailash Mozumde, Public Works Project Manager

City of Scotts Valley

- Jack Dilles, Council Member
- Allison Pfefferkorn, Recreation Manager
- Sarah Wikle, Senior Planner

City of Watsonville

- Vanessa Quiroz, Mayor
- Murray Fontes, Asst Public Works Director/City Engineer
- Justin Meek, AICP, Asst Community Development Director

Schedule

- The Hague (6/4)
- Rotterdam (6/5)
- Delft (6/6)

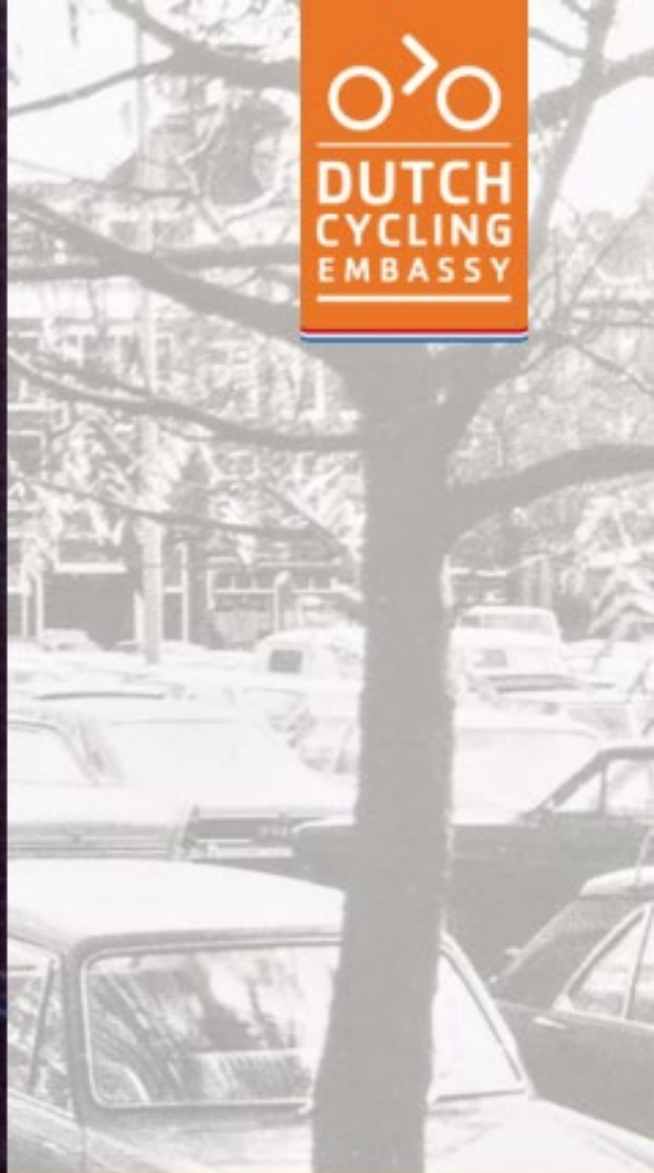


Day 1: The Hague

- **Margot Daris** gave an overview on the [Dutch Cycling Embassy](#) and the Netherlands.
- **Teun Zeegers** from Ministry for Infrastructure and Water Management presented about the [national goals](#) from the Netherlands to further increase cycling.
- **Teije Gorris** (Go-bility) presented about [cycling networks](#) and the [five design principles](#) that form the basis of a network.
- **Alex van Gent** and **Matt Bearden** (Arcadis) presented about [infrastructure design](#) and the effects of our infrastructure on our [travel behavior](#).
- **Ruben Loendersloot** (Loendersloot Consultancy) presented about [cycle highways](#) and how they [connect communities](#).



THE VIEW FROM 'FIETSPARADIJS' 



IT WASN'T ALWAYS THIS WAY 

Crisis as a Turning Point



- o>o In the Netherlands, a pair of converging crises in the 1970s created a systematic approach to safer, more sustainable, equitable, and efficient street design
- o>o In 1972, Stop de Kindermoord ("Stop Child Murder") formed in reaction to a road safety crisis that was killing 3,000 people per year, including 450 children
- o>o For six weeks in 1973, the OPEC oil embargo resulted in an abrupt gasoline shortage and 'Car Free Sundays' policy, doubling the sales of bicycles



Learning From Their Mistakes



- o>o High-profile failure of demonstration route in Tilburg in 1977: inconsistent design; inconvenient route selection which relegated cyclists to back streets
- o>o Second demonstration route failure in The Hague in 1978: lack of connectivity and consultation led to low usage; huge backlash with local business owners
- o>o The lessons learned from these two failed experiments were applied to the highly successful 1979 Delft Cycle Plan





Think at the Network Level

- o>o Rather than focusing on a single route, in 1979, Delft officials decided to implement a city-wide cycle network
- o>o After consulting with 4,700 households, three networks (of varying grid sizes) were planned; each with a specific journey type, length, and user in mind
- o>o Completed in 1987; lessons learned inform the CROW Manual network design principles of directness, safety, comfort, cohesion, and attractiveness

Don't Ignore the Weakest Link



- o>o A network is only as good as its weakest link: often at the intersection where the majority of collisions occur and the cycling infrastructure can “disappear”
- o>o Signalized and unsignalized junctions are physically protected and designed to reduce speeds and raise awareness, increasing safety for all road users
- o>o Raised and continuous cycle path at side streets keeps vulnerable users in a raised, seamless and prioritized space

Road categorization



1. National /
Regional through routes
Speed limits 130/120/100/80km/h
(80/75/62/50mph)

No cycling

2. Local distributing –
collector roads

Speed limits 50km/h (31mph)

Physical or Visible separation

3. Access streets / Places

Speed limit 30km/h (18mph)

No separation needed



Every Mobility Plan Needs a Car Plan



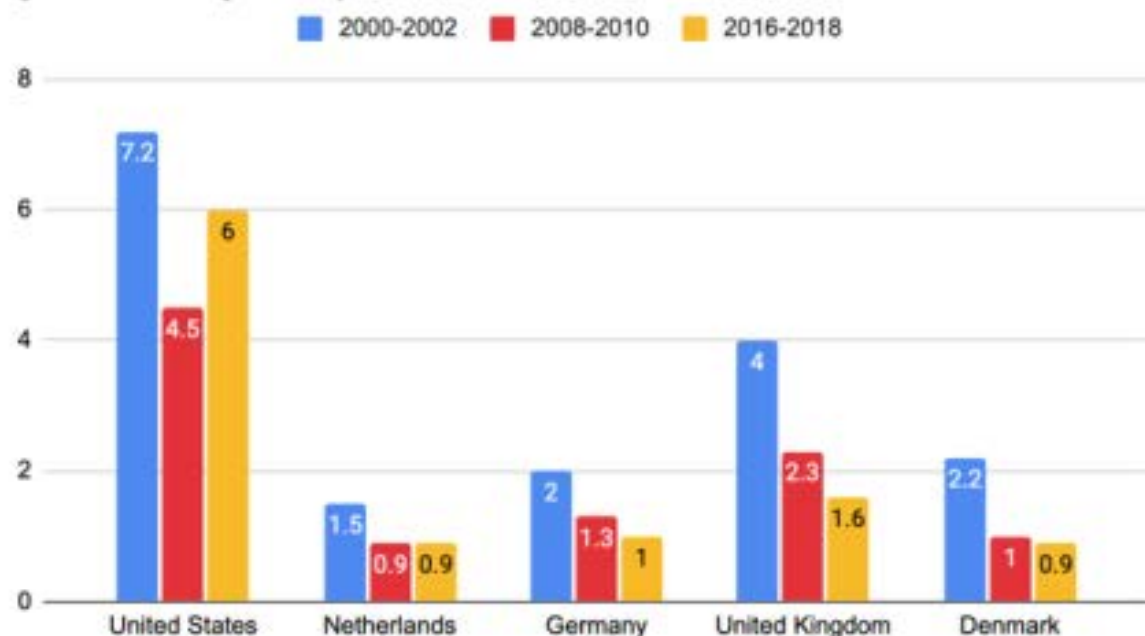
- o>o Effective traffic circulation—ie. reducing the volume and access of motor vehicles—can form an easy and effective part of a city's cycling network
- o>o Dutch cities create a “hierarchy of roads”—differentiating between local and through traffic—diverting cars from economic and residential areas
- o>o Physical methods are used to slow motorists down such as road narrowing, chicanes, texture, and speed tables



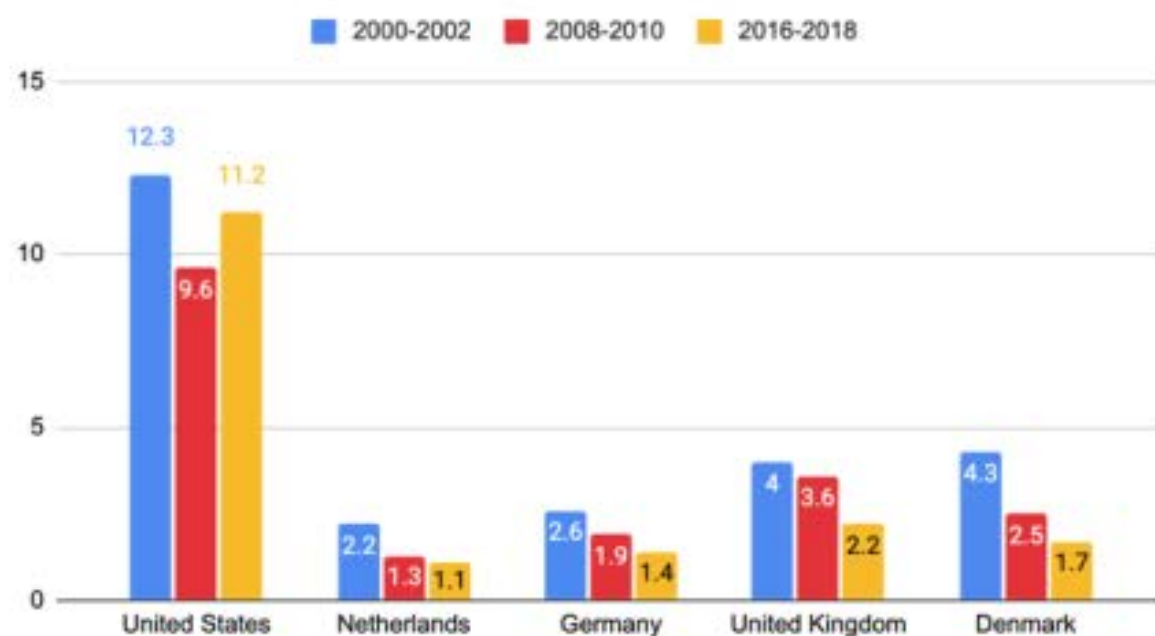
The Safest Streets in the World

“If the U.S had achieved the same improvements in traffic safety as the Netherlands [since 1970], 22,000 fewer Americans would have died on our roads in 2015.” – Vox

Cyclist fatality rate per 100 million kilometres biked



Pedestrian fatality rate per 100 million kilometres walked



The Kid-Friendly City



- o>o Two-thirds of all Dutch children walk or cycle to school; for secondary school students, that number is closer to 75%
- o>o The 12-17 age group cycles more than any other age group (60% of ALL trips)
- o>o UNICEF regularly ranks Dutch children among the happiest in the world; specifically citing their unrivalled levels of physical activity, freedom, autonomy
- o>o Also boast lowest levels of childhood obesity and depression in the EU

The Caregiving City



- o>o Reverse gender gap: mode share for women is 28% (versus 26% for men)
- o>o Women are more likely to make shorter, multi-purpose, non-car trips
- o>o Planners often fail to consider care trips (ie. dropping kids at school) and trip-chaining (ie. proceeding to the office); because they don't have the data
- o>o Childhood independence also relieves burden of supervised transport, which mostly falls on female shoulders



The Accessible City



- o>o Inclusive infrastructure means 16% of all trips made by physically impaired people in the Netherlands are pedal powered; often on adapted vehicles (electric tricycles or hand cycles)
- o>o For those who can't cycle, wide (at least 225 cm) space welcomes other modes; ie. (motorized or manual) wheelchairs
- o>o Details matter: angled (forgiving) curbs, plentiful curb cuts, smooth asphalt, visual cues/edges, gentle gradients

The Aging City



- o>o Reverse age gap: 65-75 age group has a higher share than all adult categories
- o>o From 2010 to 2017, Dutch seniors (75 and over) cycled 33% more kilometers
- o>o Roughly 80% of e-bikes sold in the Netherlands are to people aged 50+
- o>o "An elderly person who cycles covers an area of 14 km in their daily life. The non-cyclist doesn't travel further than 10 km." – Utrecht University study





Cycling for Everyone.

EMAIL INFO@DUTCHCYCLING.NL
WEBSITE WWW.DUTCHCYCLING.NL



The Hague

The study visit started in **The Hague**:

- After presentations indoors, it was time to hop on our bikes and cycle to the beach.
- The city is located next to the [sea](#) (and below sea level).
- The group experienced the ease to cycle from the busy city center to the lively beach village Scheveningen.

The Hague











Day 2: Rotterdam

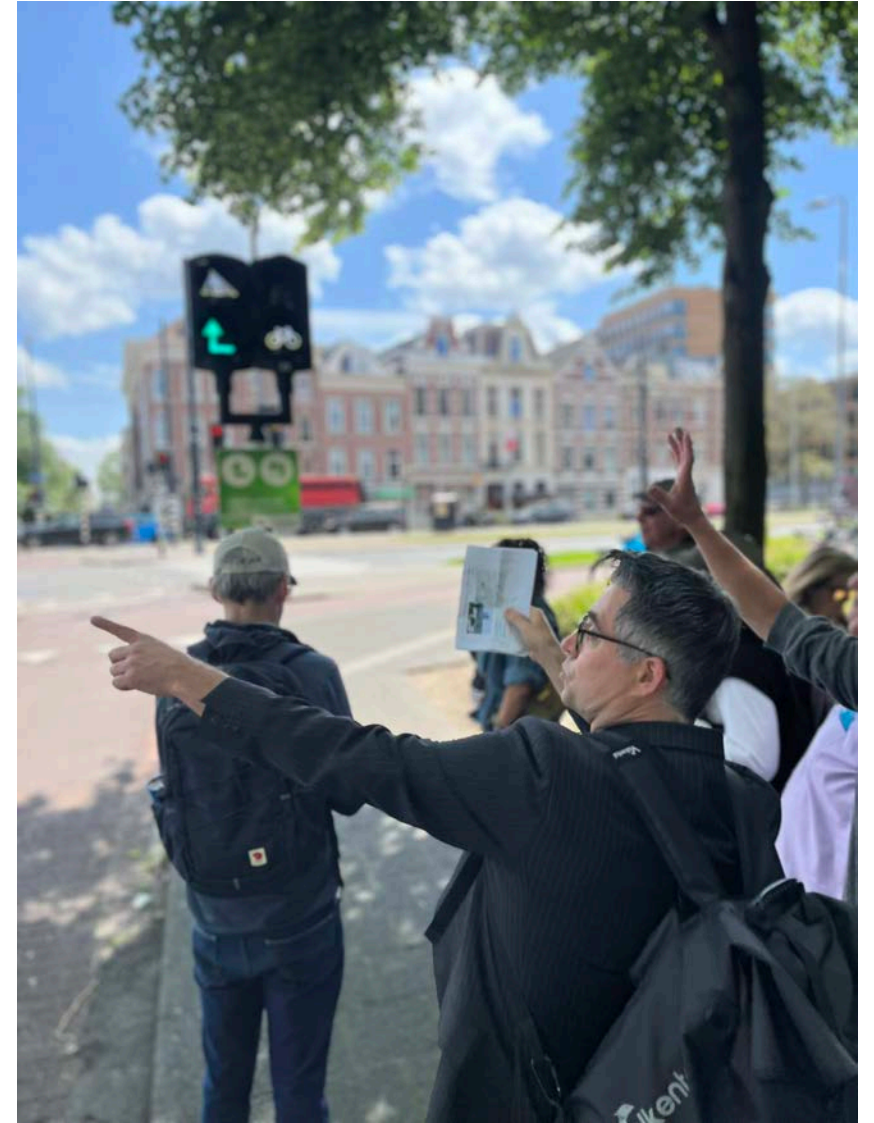
- The second biggest city of the Netherlands and a city with a very **urban** character.
- **Bart Christiaens** (City of Rotterdam) welcomed the group and presented about the **city's vision** for cycling and how to help everyone in the city to own a bike.
- **Ruxandra Aelenei** (R.A. Planning) presented how a bike plan always needs a **car plan**.
 - This is to improve the traffic flow for all road users and to create safe situations.
- **Maurits Lopes Cardozo** showed us the ins and outs of **intersection design** and when to choose for a signalized intersection and when a roundabout is the better option.

Rotterdam

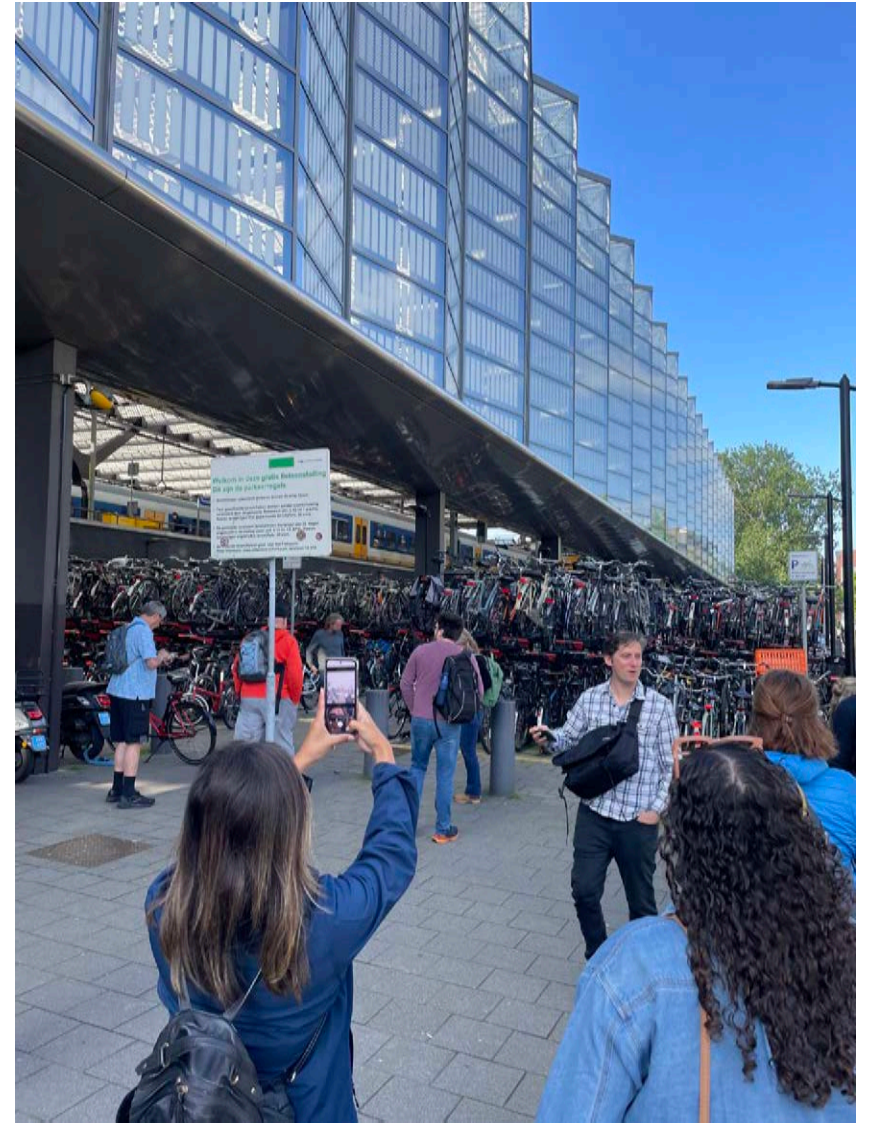
- In the afternoon we explored Rotterdam by bike, with the Erasmus Bridge as one of the highlights of the day.

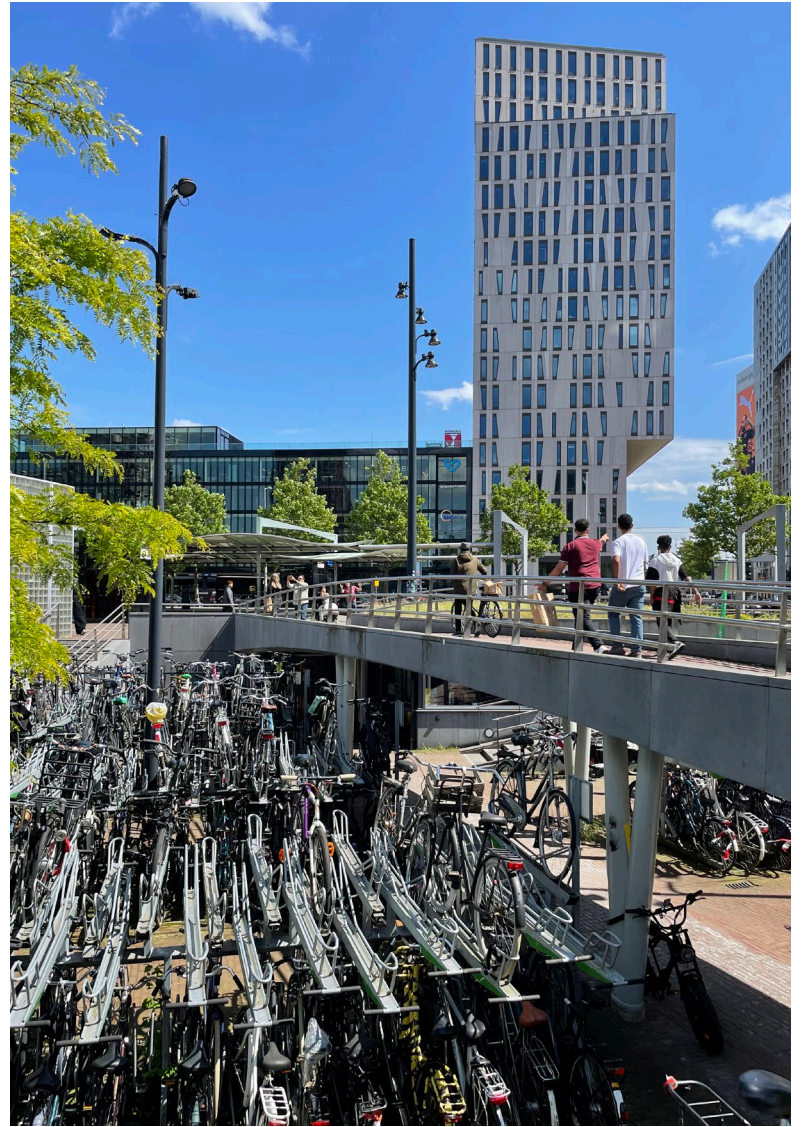
Rotterdam

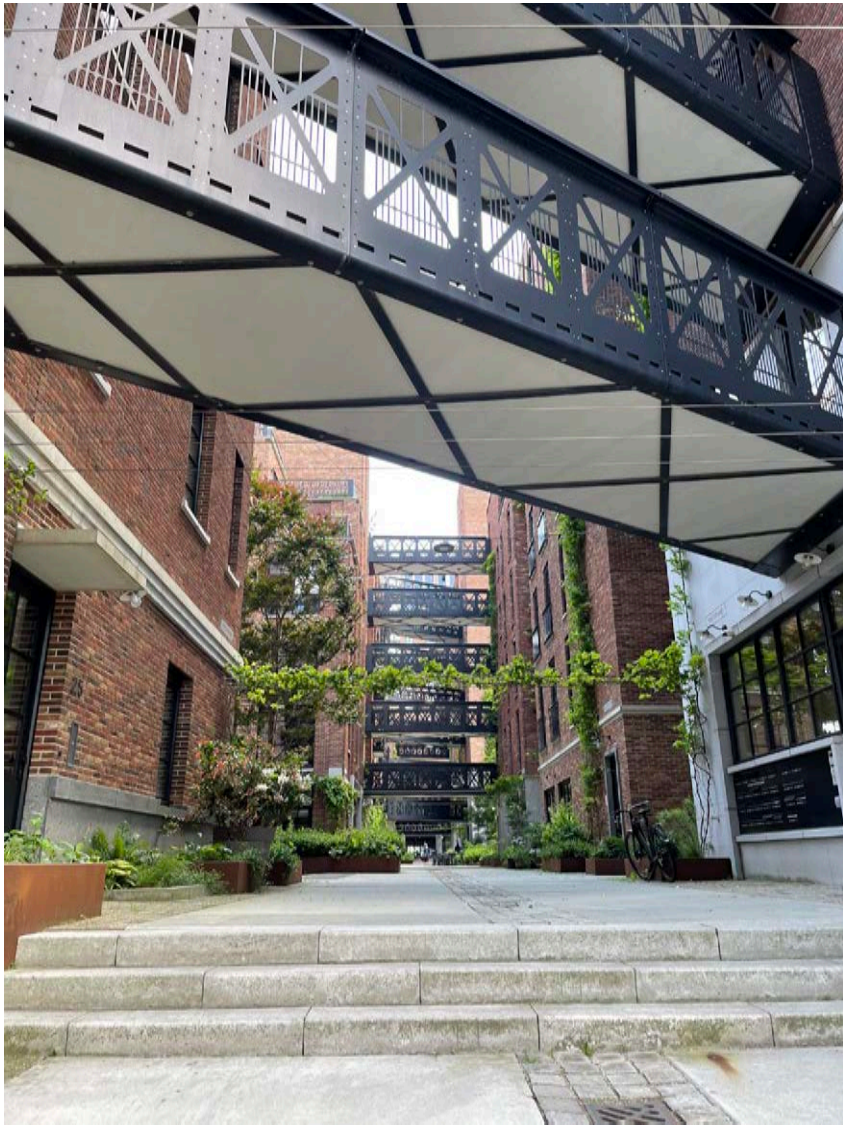












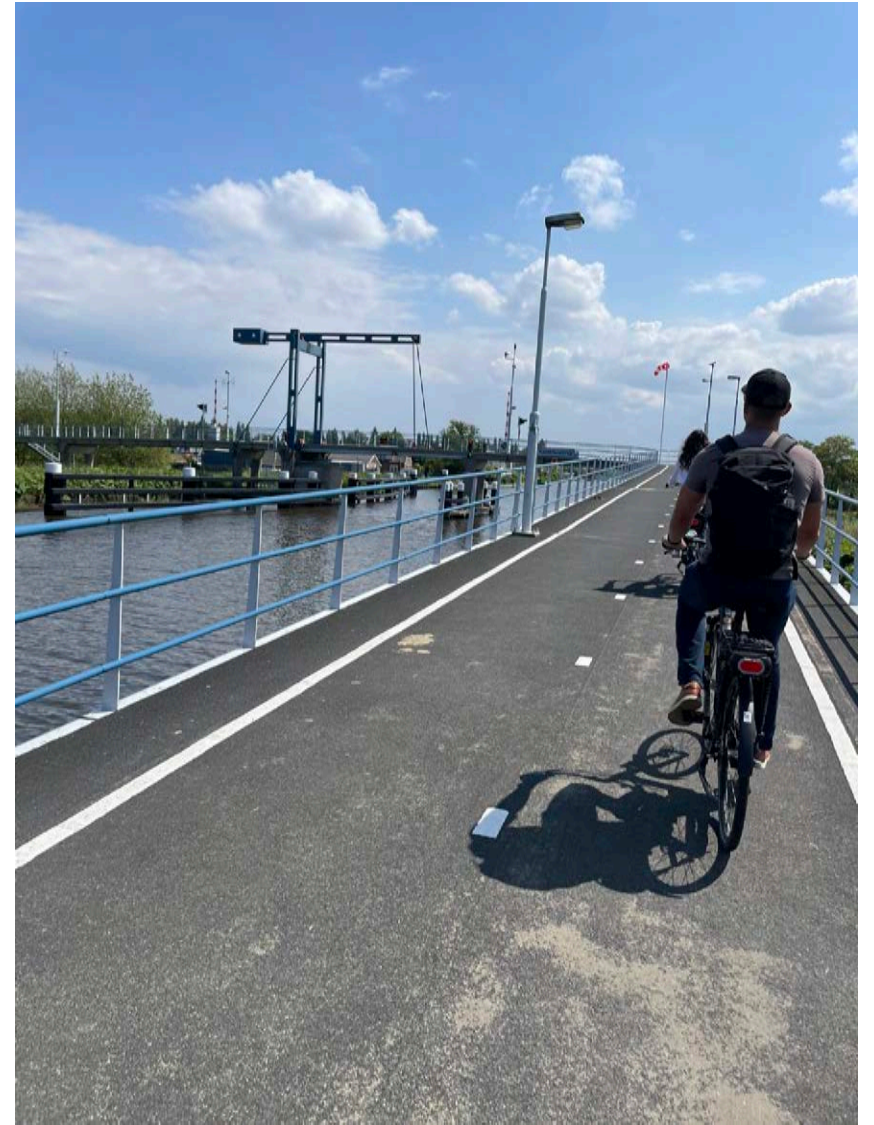
Day 3: Delft

- Delft is a **university town** of 100,000 people.
- **Lennart Nout** and **Anna Wyner** dived in deep with discussions about **signalization**, **car-free school zones**, and **tactical urbanism**.
- The bike tour was split in two: one group focusing on school zones and residential areas, whereas the other group biked to the outskirts of Delft for a rural cycling experience.

Delft









Takeaways



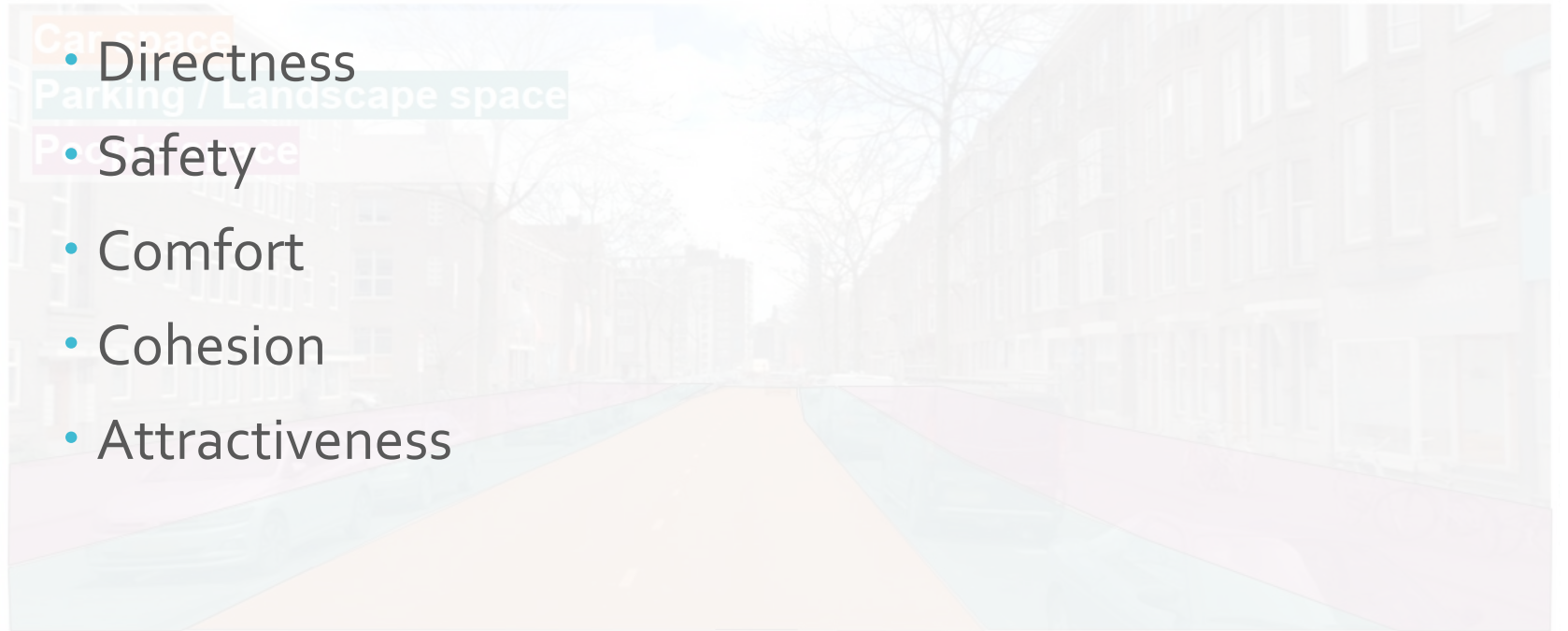
Takeaways

- Crises represent opportunities
- Focus on the people, place and networks
- Long-range plans and political support are key
- Incremental implementation takes time, money and effort
- Slowing down traffic is critical for safety and sharing roads
- Keep a keen eye to the weakest links (e.g., intersections)

Key considerations

The Street Space

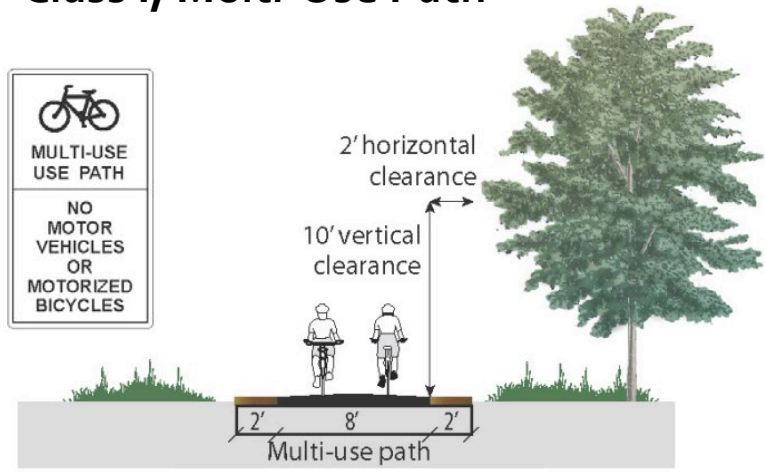
- Directness
- Safety
- Comfort
- Cohesion
- Attractiveness



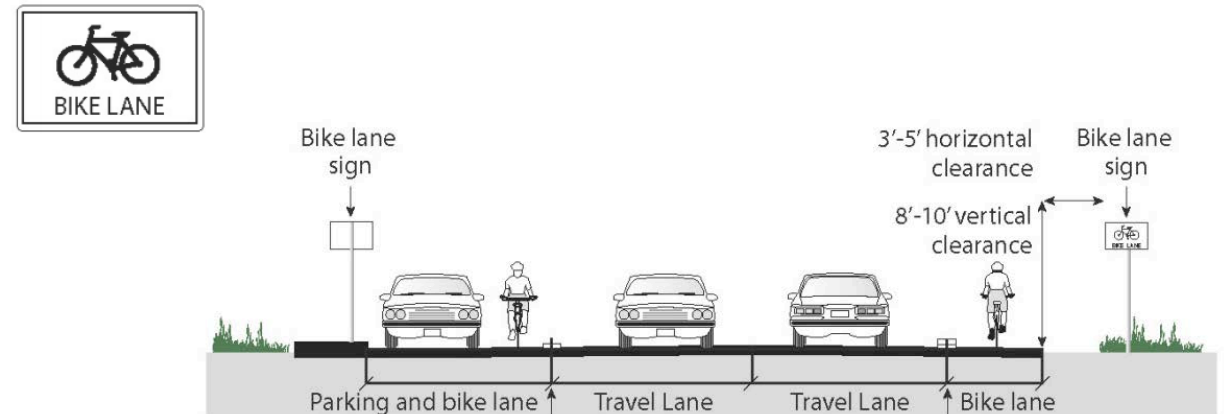
Next steps?



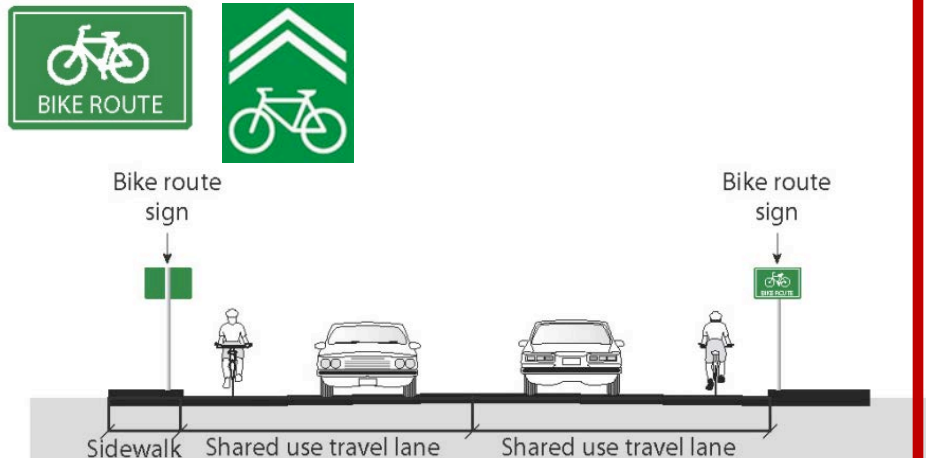
Class I, Multi-Use Path



Class II, Bike Lane



Class III, Bike Route

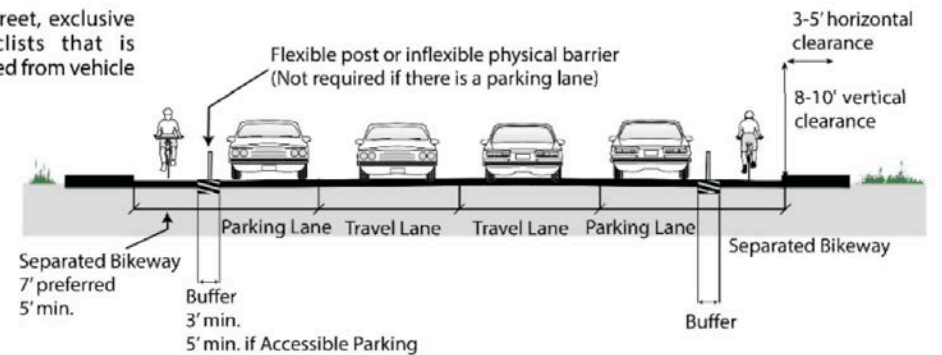


Preferred Treatment on Collector and Arterial Streets

Class IV, Protected Bikeway

(Proposed for Study as Part of Project Implementations)

Provides an on-street, exclusive space for bicyclists that is physically separated from vehicle travel lanes.



Class III – Bike Lane Adjustments to calm traffic

EXISTING

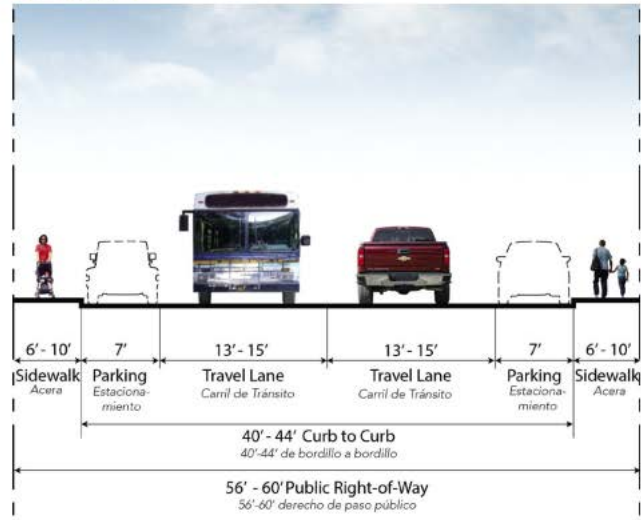


PHOTO CAPTION—Existing View of Union Street; Source: Google Maps 2022

Figure 4-7 Future Union Street Cross Section (Maple Avenue to Grant Street)

PROPOSED

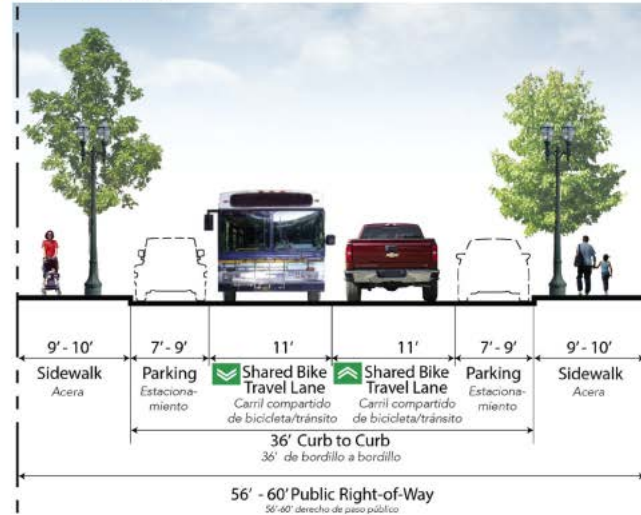


Figure 25 | Brennan Street/Union Street Cross Sections

**All improvements shown are conceptual and subject to further study and refinement.*

West 5th Street

Figure 4-8 shows the existing view and future cross section for a typical neighborhood street such as West 5th Street. Neighborhood streets will provide sharrows with signage and traffic calming measures to create a low-stress environment for people walking and biking. Neighborhood streets connect to major east-west and north-south corridors within the bicycle network.



PHOTO CAPTION— Existing View of West 5th Street; Source: Google Maps 2022

SUMMARY OF CHANGES:

- Maintain existing ROW and number of vehicle travel lanes, maintain 11-foot vehicle lanes
- Reduce parking lane width by 1 foot, from 8 feet to 7 feet.
- Add Class III marked sharrows with signage.
- Provide a 2-foot buffer between the parking lane and Class III sharrows.
- Preserve residential on-street parking.
- Integrate traffic calming measures such as bulb-outs at intersections, and chicanes or planter boxes at midblock locations where feasible.

Figure 4-8 Future West 5th Street Cross Section (Walker Street to Rodriguez Street)



Class IV – Protected Bikeway Example Traffic Calming



For more
information
contact...

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