

Trails, Cycling, and Older Adults

What we can learn about cycling and health, trails and older adult

American Trails Webinar, September 21, 2023

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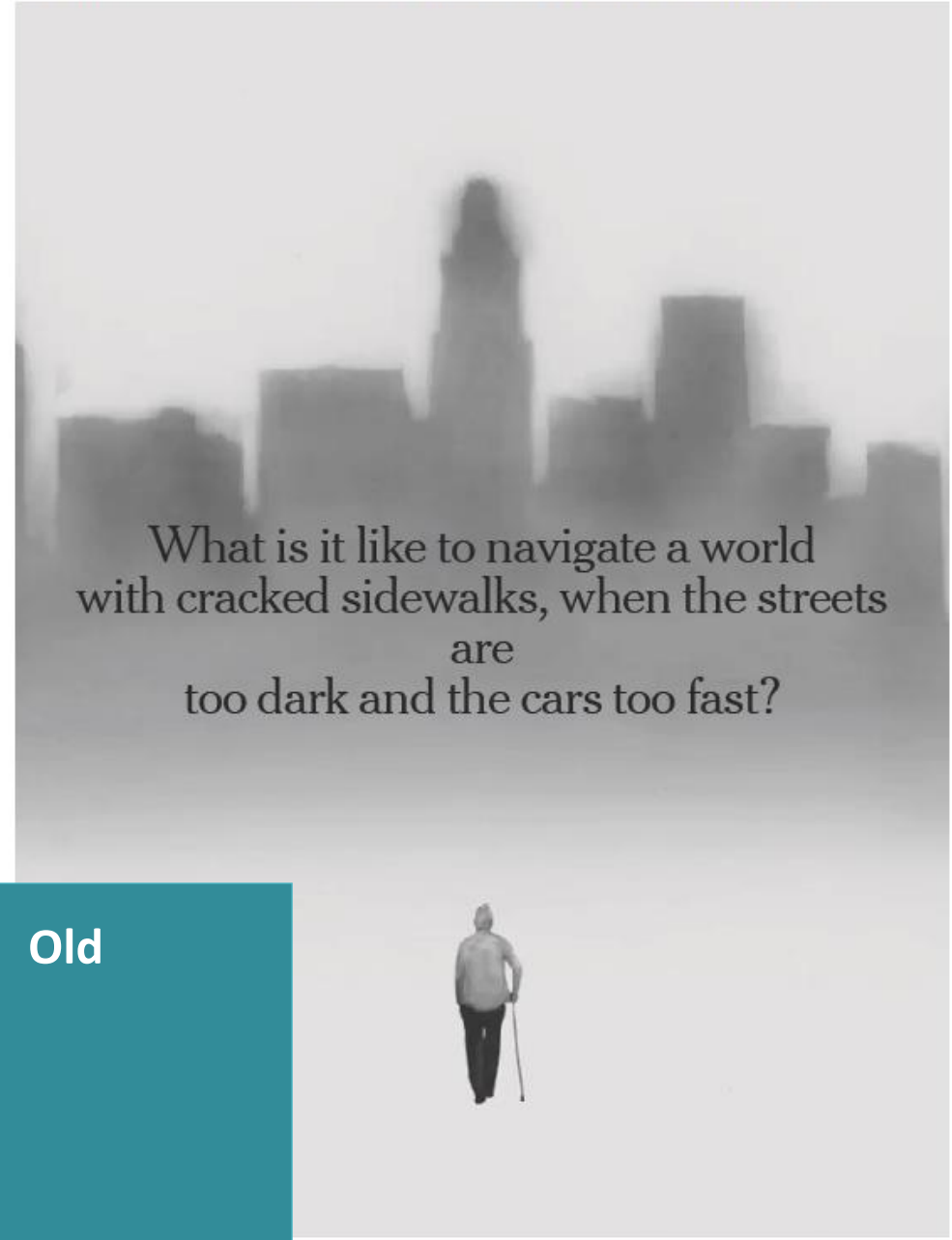
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Not old

Old



What is it like to navigate a world with cracked sidewalks, when the streets are too dark and the cars too fast?

<https://www.nytimes.com/interactive/2023/09/06/opinion/seniors-urban-planning.html>

Instead...



Underlying assumptions

- People need to be and can be physically active as they age
- Cycling is an age-friendly form of physical activity that has physical, psychological, and social benefits
- Trails are a logical go-to place for older cyclists
- Cycling infrastructure, programs and policies need to reflect the needs of older adults
 - Older adults are often not included as a resource for these items
 - Social pressure to stop cycling



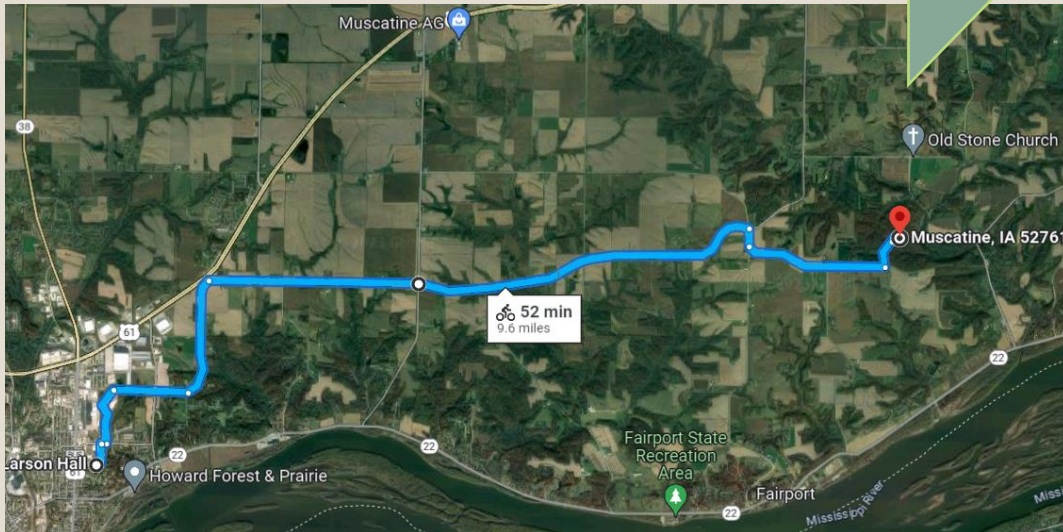
Agenda

What we've learned from

- 50+ Cycling Survey & Journals
- Older Adult Communities

Identify
what's
important

Begin to
use it



50+ Cycling Survey grew out of a cancelled interview with a 78-year-old woman cyclist

Part 1:
Demographics,
Cycling History,
Cycling
preferences, etc.

Part 2:
Visual
Preference

Online Journal

Value of the survey

The background of the slide is a photograph of two cyclists riding on a paved path. The cyclist in the foreground is wearing a bright orange jacket and a green pannier bag. The second cyclist is further ahead, wearing a red jacket. The path is lined with cherry blossom trees in full bloom, with pink and white flowers visible against a blue sky with light clouds.

**Expands
knowledge of
physical activity
and aging
(within survey)**

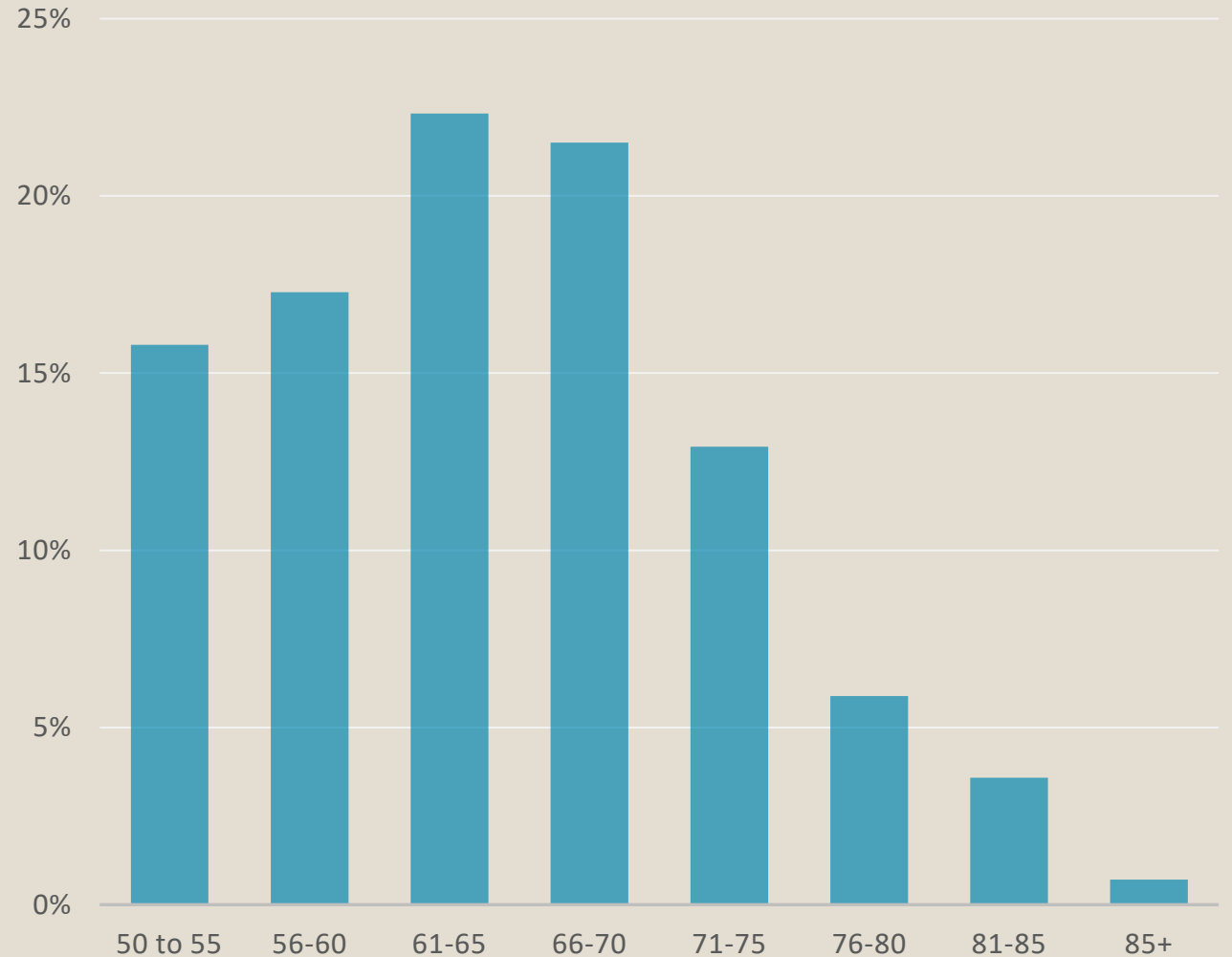
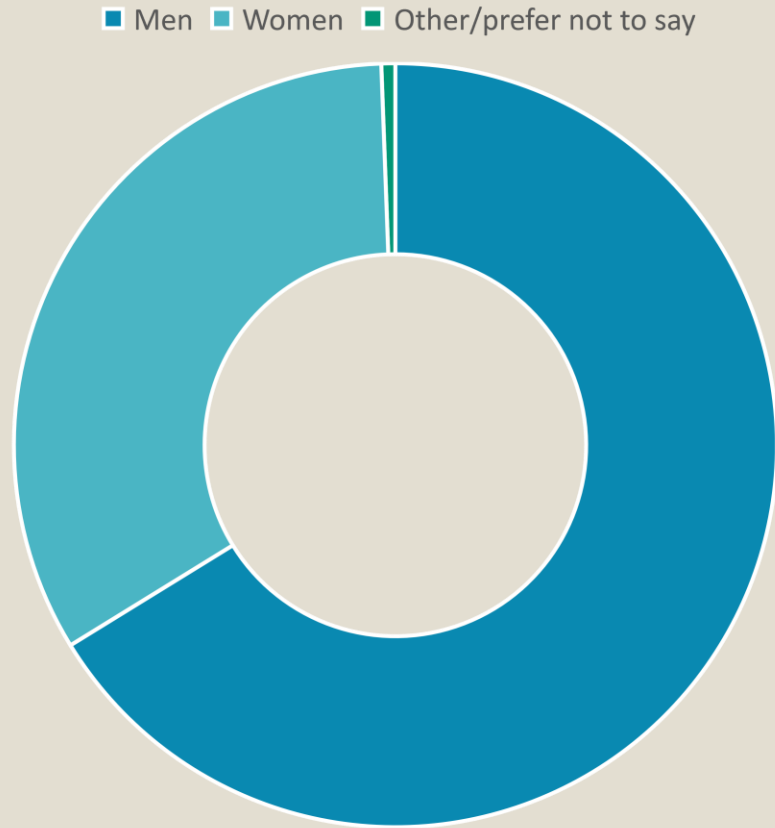
**Multiple years
tracks changes**

**Serves as a self-
assessment for
ways to continue
cycling**

**Informs
planning, policy,
programs
beyond the 8 to
80 framework**

**Older cyclists
appreciate being
asked**

50+ Cycling Survey, Year 4 (5,000+ responses)

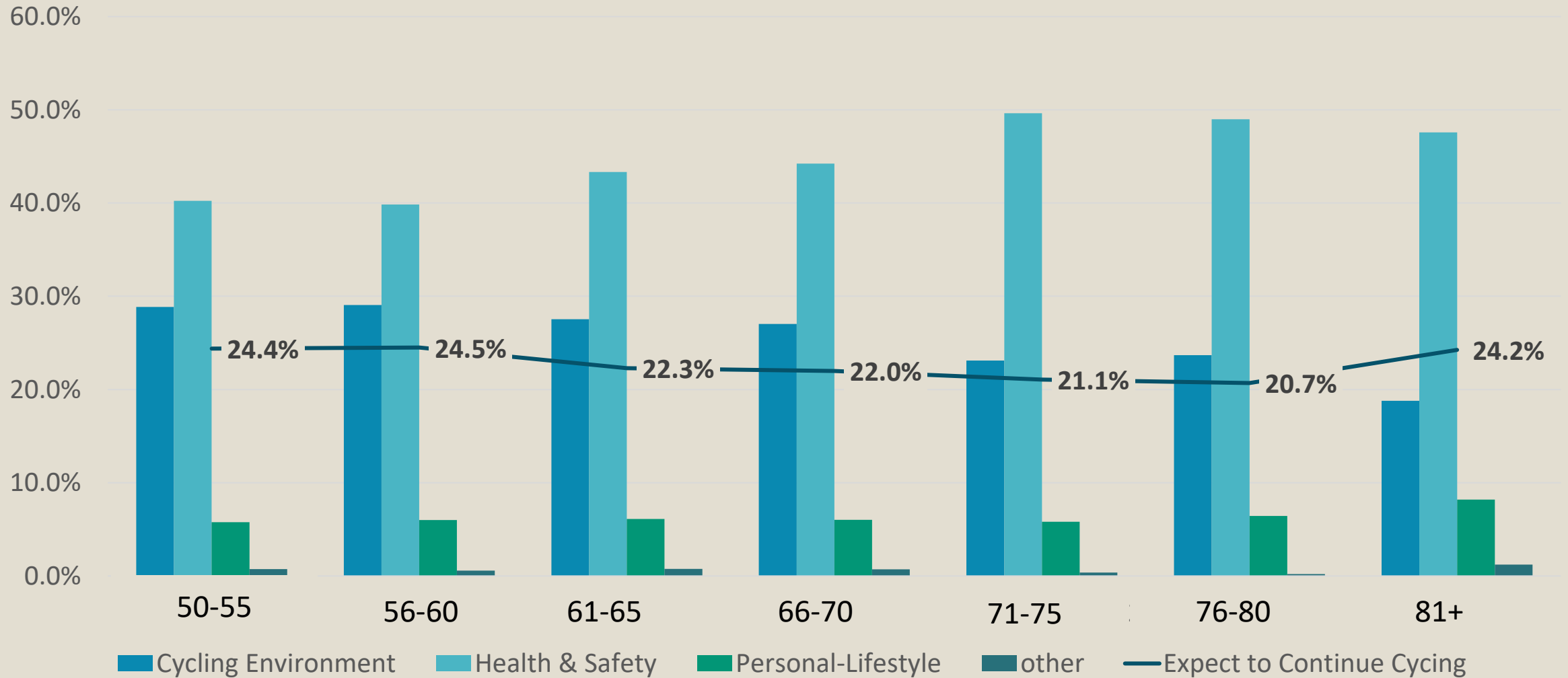


A Coat of Many Colors

- Ride 1 x month to daily
- Cycle alone
- Cycle at night
- Ride for transportation
- Ride for exercise and fitness
- Ride to enjoy nature
- Ride to be social
- Ride a couple of miles to 50 or more
- Cycle on trails, streets, sidewalks
- In urban, suburban, rural environments
- Year 'round or weather-dependent
- On different types of bikes
- Are cycling into their 90s
- Crashes deter some; inspire others to recover



Start with the end in mind: Can you envision a time when you would not cycle?



Factors affecting where older adults cycle

Cycling Environment

Environment

- Other cyclists present
- Easy & safe bike parking
- Pleasant vistas, parks
- Easy connections to destinations

Health & Safety

- Benches for breaks
- Shade to cool off
- Bathrooms, water fountains
- Few or no cars
- Roads in good condition, no debris
- Low volume, speed neighborhood streets
- Protected bike lanes
- Overall feeling of being safe

Social Relations

- Places to stop, eat, shop, visit
- Group Rides

Personal-Lifestyle

- Ride primarily during the day
- Avoiding rush hours
- Avoid night cycling

23.2%



54.1%



9.6%



13.2%



Why the amount of my cycling changed last year

Health & Safety 48.6%	Cycling Environment 15.4%	Work related 14.9%	Personal-Lifestyle 14.2%	Social Relations 6.9%
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Cycling less

Cycling more

Personal-Lifestyle 32.9%	Health & Safety 25.9%	Cycling Environment 22.7%	Social Relations 16.8%	Work related 1.8%
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The elephant in the room: crashes

Past year falls by category



- Surface Conditions, construction, design
- Operator Error
- Actions of Others
- Bike Issues
- Weather
- Skill level or aging

Past Year Falls

Surface Condition

- Gravel, sand, soft dirt on path
- Slippery bridge
- Potholes, depressions, ditches
- Narrow passageways
- Sharp turns by design; off-set pathways
- Steep trail access
- Limited facility features – capacity, lighting, sight lines

Operator Error

- Inattention or focus, poor bike handling or decision-making
- Going too fast for conditions or my skill level
- Trouble stopping and starting
- My fault, stupidity, clumsiness
- I don't know; I don't remember

Age-related Limitations

- Balance issue, at slow speed, getting on/off bike
- Health issue; physical strength or agility, effects of heat or fatigue
- Inattention or focus, poor bike handling or decision-making
- Effects of aging



Design &
Maintenance



Age-related

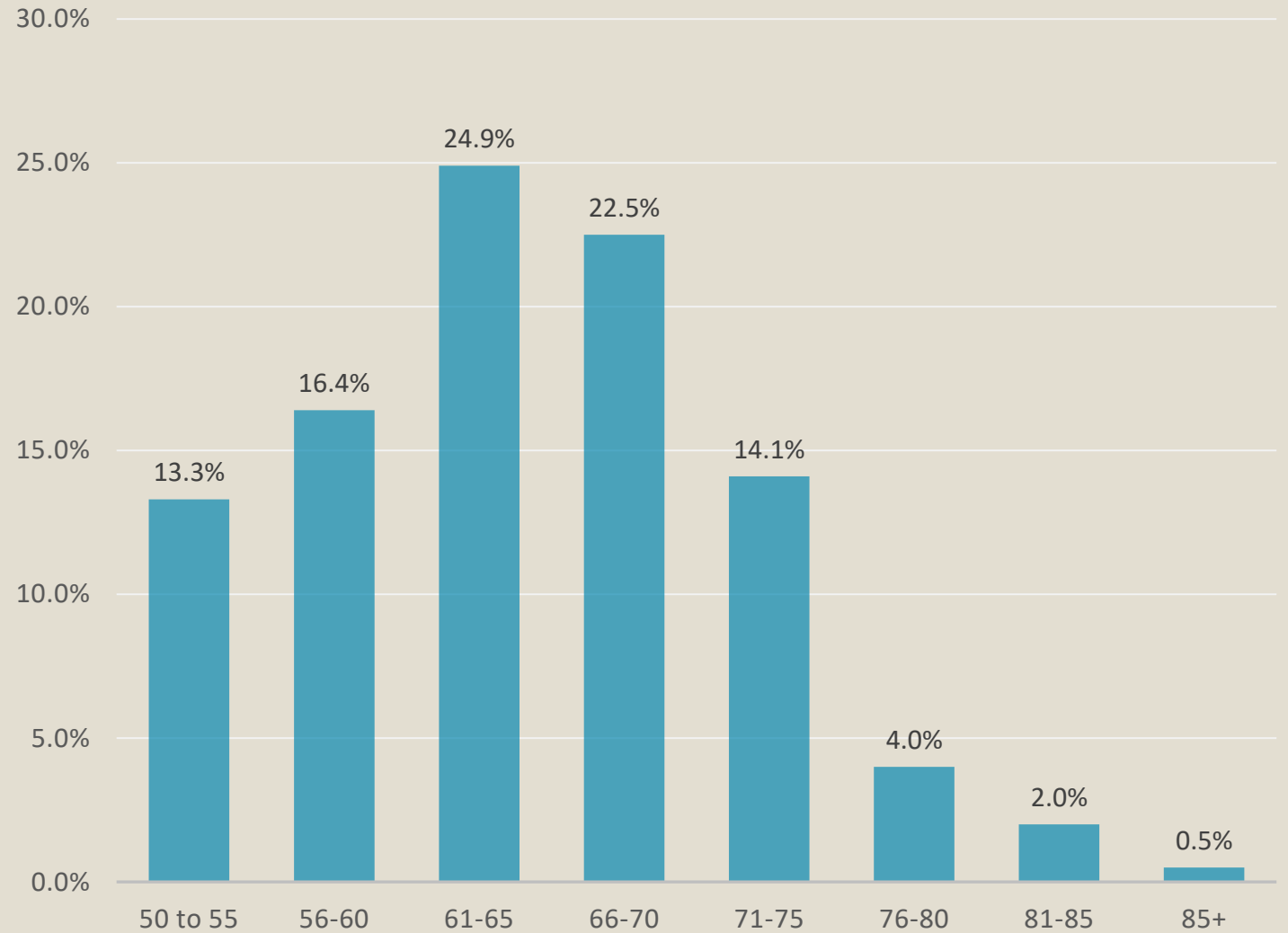
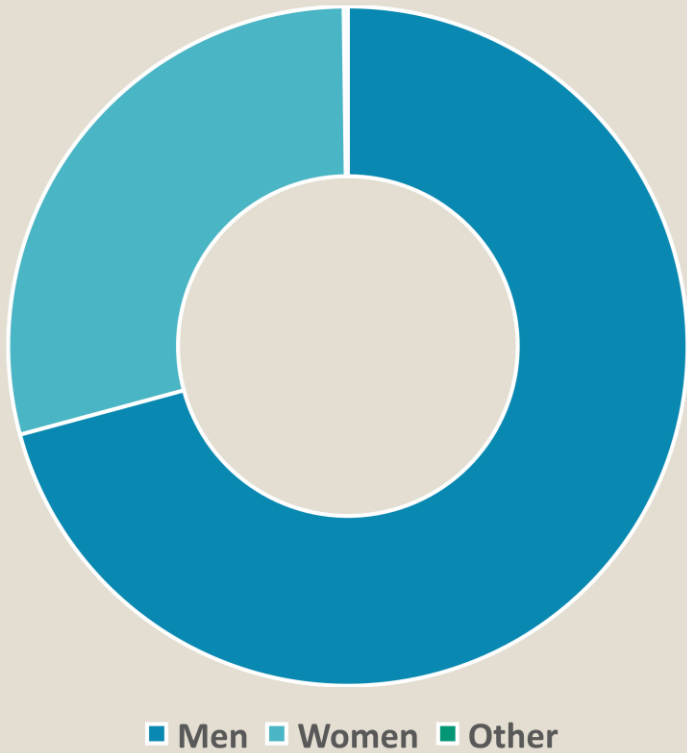


Age-related

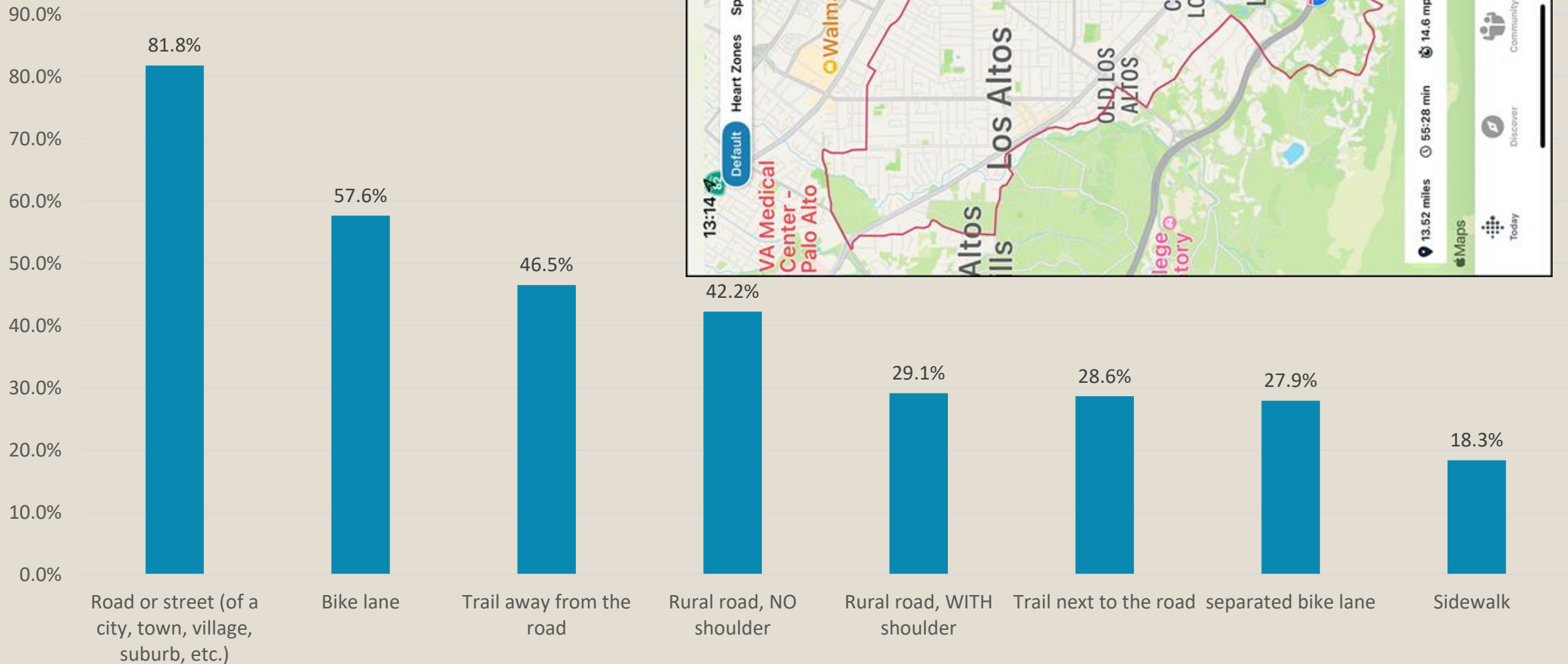
Experience during cycling trip Year 4 Online Journal (845 responses)



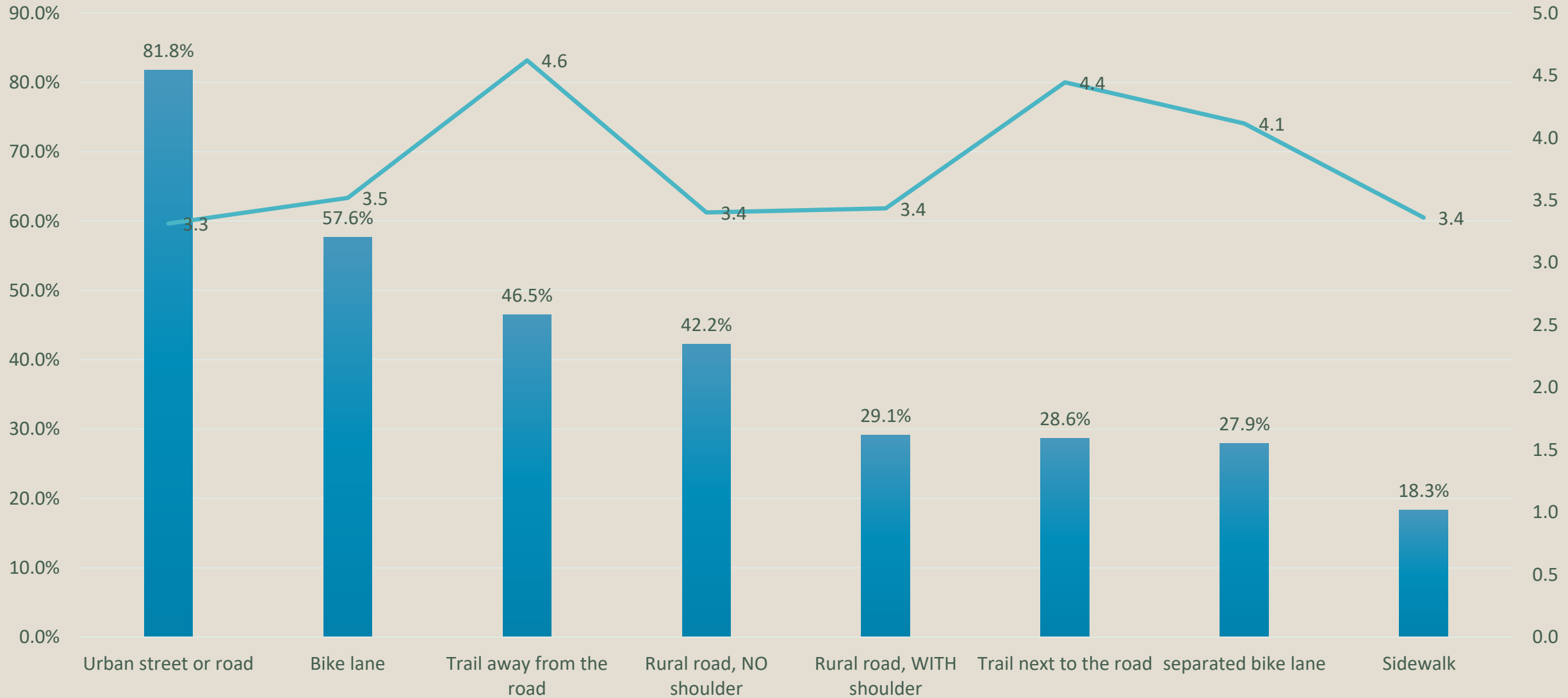
Who journaled?



Where did you cycle?



How safe and comfortable was it?



What worked well?



Trail infrastructure & Context

- Being able to spend a significant portion of the trip on rails to trails.
- Great riding safety on paved off-street bike paths, and on well-marked bike lanes on not particularly busy city streets.
- Well planned route picked specifically because it contained many bike trails and bike lane.
- Having friends nearby while riding trail sections occupied by "campers" and loiterers. Traffic signals that were actually triggered by bicycle presence.
- Good covered bicycle rack at my destination.



Nature & Trails

- A dedicated bike/pedestrian trail in a forest pres... river, no traffic.
- Being out... singing, seeing other cy...
- The enjoy... and a total of over 2,000 mi...
- Beautiful winter day, watched a coyote hunting.
- Beautiful day for a ride with husband.
- Scenery ...animals...
- I dressed right for the cold.

YEA
Nature!

- Trail built within a nature setting such as a forest, along a river
- Trails create opportunity to enjoy the day – sun, air, etc.



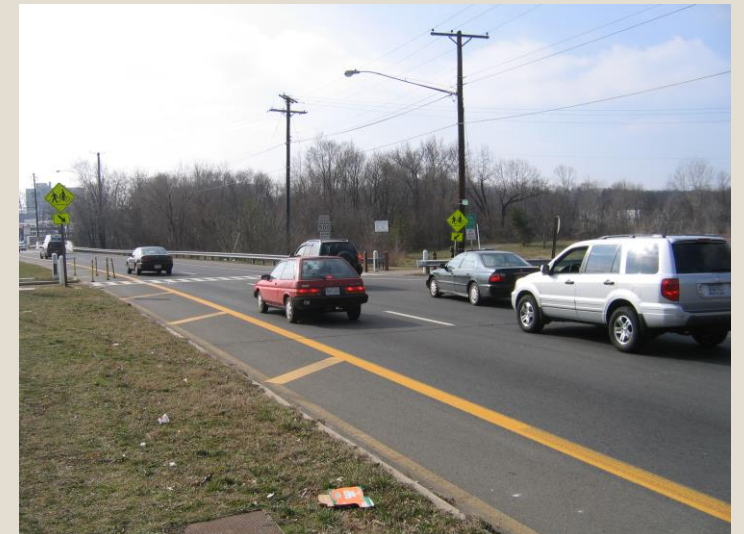


What didn't work well? What did you use despite safety & comfort concerns?

Trail Access: Street & roads as connections

- Turning left to get to the bike path. The bike path begins at the top of a T intersection, but you need to jog left on a five-lane road to get to it.
- Down a steep city street with a stop light at the bottom on a wet evening. It's the best way to get to a greenway.
- Crossing a 2-lane 45 mph main road to reach the trail. We cross very, very carefully.
- My route is almost entirely a separated bikeway or a rural two-lane road, ...BUT I have no choice but to cross Hwy 126 at some point in my ride. There are no good crossings.

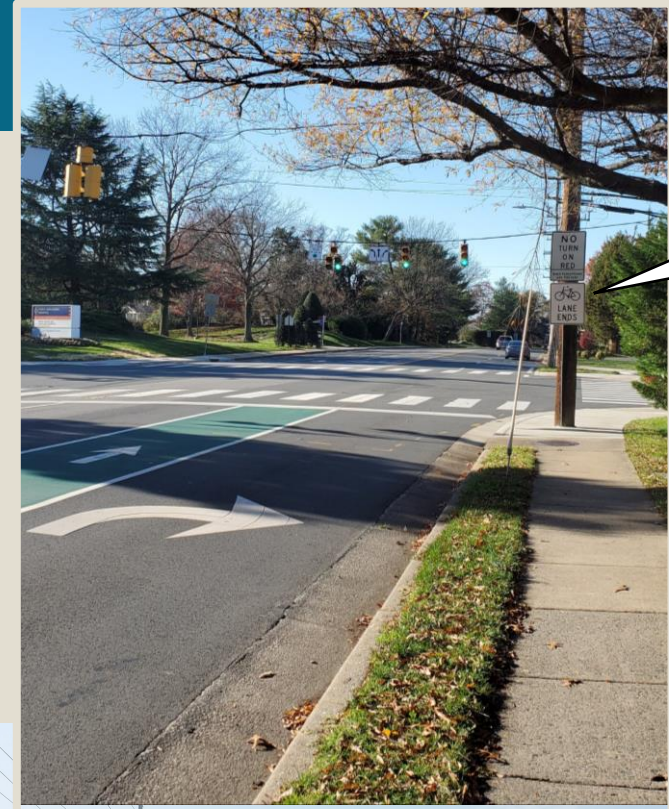
- **Trail access from street and highway grid, especially at intersections**



Trail Gaps

- Missing trail segment forcing cycling on-road

- There was a 1/4-mile missing segment of paved bike trail between two segments of paved bike trail. I rode in the public (rural) street that had two 11'-foot traffic lanes and no shoulder or bike lane to connect these two segments of paved bike path. I did not ride on the "use" path that was on the property about 30' from the edge of the road. While I was on the road, there were no cars passing in either direction. Immediately when I had the opportunity, I rejoined the paved bicycle path.
- A strange part of the separated bike route where ... the separated route...stops..and [cyclists] then ... share the road with cars, [then needing]...to turn left at a traffic light to re-join the separated path. There are not directions about how to do this. It feels somewhat dangerous to turn left against oncoming cars in an unregulated intersection.



Trail conditions

- The bike path on the side of Viers Mill Road is not wide or separated from cars and there is a lot of traffic.
- Bike path is getting very bumpy in places due to tree roots.



- Trail surface condition.
- Trail capacity and placement.

Isolation Factor

- Biking alone on a country trail early in the morning far from a city. I kept thinking that no one would find me if I had an accident. No one else was on the trail but if I met someone, I am not sure that would have felt safe either. I always bike with someone, so it was an unusual experience.



- Isolation factor – what safety features are available?

What did you avoid?




What did you avoid?

- I avoided areas where there were gaps in the trail and I wasn't sure how they were supposed to connect, i.e., which roads would be suitable.
- I avoided non-paved trails because of expected mud.
- I chose to trail ride because of a recent near miss on a road ride I definitely avoided going off the trail.
- I drive to the trail when I used to ride to it because the local roads are too dangerous to ride now.
- I ride only a short distance on the main north-south road in my area because the lane is narrow, changes width, has no buffer. Then, I jump off onto a gravel trail that runs along a small creek for a mile until it meets a larger paved trail along a larger creek. On the gravel (with thousands of fallen acorns) travel is slow--but there are absolutely NO motor vehicles.

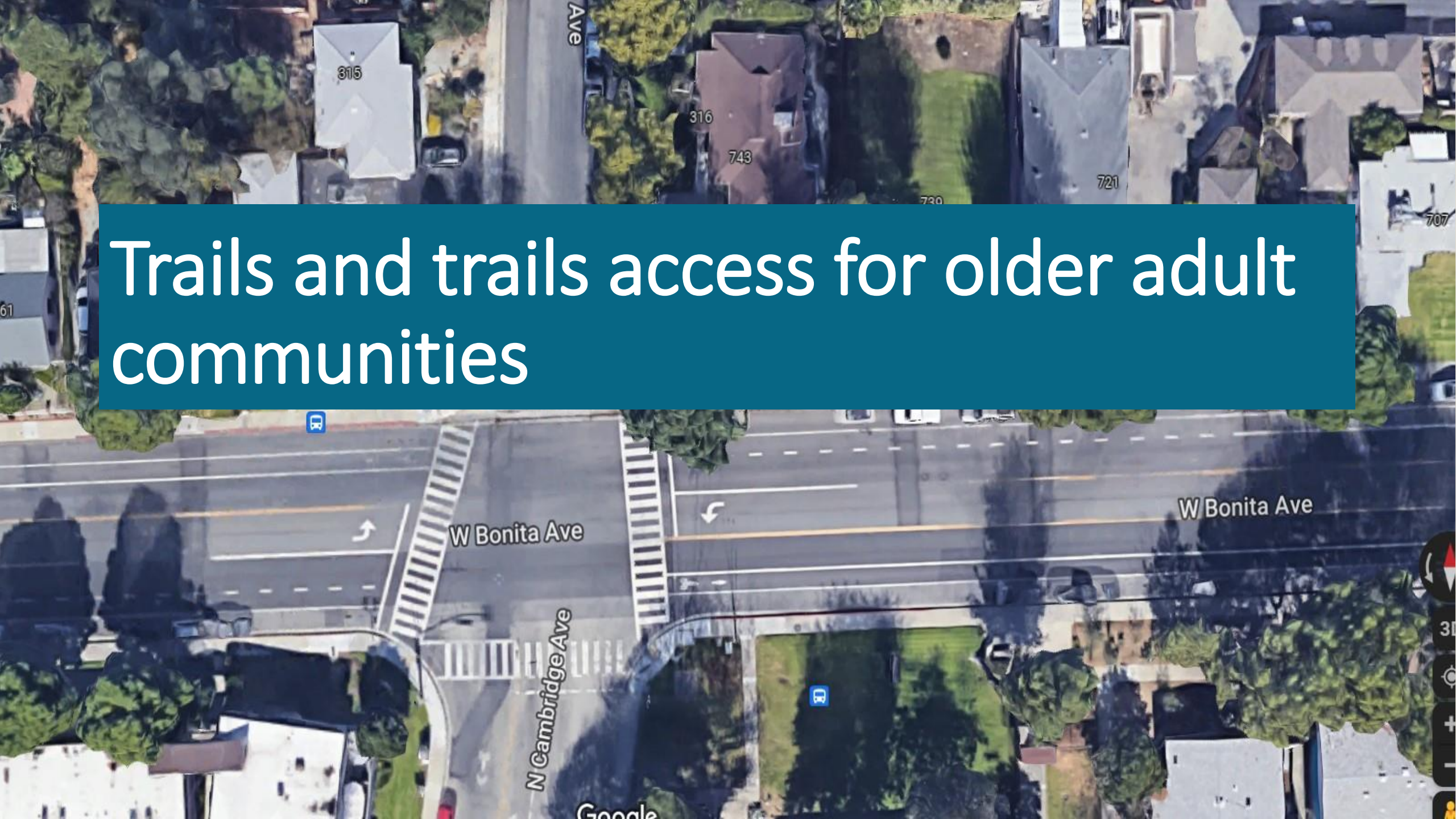
- **Trail gaps.**
- **Uncomfortable trail conditions.**
- **Unsafe & uncomfortable trail options.**
- **Unsafe trail access resulting in 'driving to ride.'**



A man wearing a white cap, an orange t-shirt, and light blue shorts is riding a pink bicycle on a paved path. He is smiling and pointing towards the camera. The bicycle has a white basket on the back. The background consists of tall grasses and trees.

*After so many years
of cycling, I'm
grateful to still be
able to do this. It's
still mucho fun!*

Trails and trails access for older adult communities



Project overview

- Presence of Active Mobility Infrastructure for residents of 10 OAC in 8 California jurisdictions
 - Interviewed older adult community and city government staff
 - Surveyed residents; conversations
 - Reviewed of communities and surrounding areas
- Mix of
 - Active living to tiered living communities
 - Housing type included SFH, duplex, manufactured homes, apartments
 - Household income range of low income to 'portfolio' residents



Project 2159 | 2023

SJSU SAN JOSÉ STATE UNIVERSITY

MTI MINETA TRANSPORTATION INSTITUTE

Enhancing Older Adults' Mobility in Active Living and Tiered Living Communities

Yongping Zhang Carol Kachadoorian Wen Cheng Edward Clay

The image contains two side-by-side photographs. The left photo shows the lower half of an older person wearing dark pants and a brown sweater, holding a wooden cane on a paved path. The right photo shows a woman with short grey hair, wearing a blue jacket and a grey scarf, crouching on a path and adjusting her black athletic shoe. She is wearing a blue smartwatch on her left wrist.

CSUTC California State University Transportation Consortium

CalPolyPomona

CSU TRANSPORTATION CONSORTIUM transweb.sjsu.edu/csutc

What about trails and access to them?

Encina Royale (Goleta)

- Developed in the 1960's
- Attracts residents who want to walk or cycle to nearby destinations

Trails within a park are 2 miles away; trail head for Stevens Creek Trail is 3-4 miles away via a less-than-ideal route. Thanks to residents' advocacy, the 2018 BPMP recommends improved bikeways, but need for safe and comfortable crossings of large roads remains.



Figure 4-3: Project List Northeast Map

What about trails and access to them?

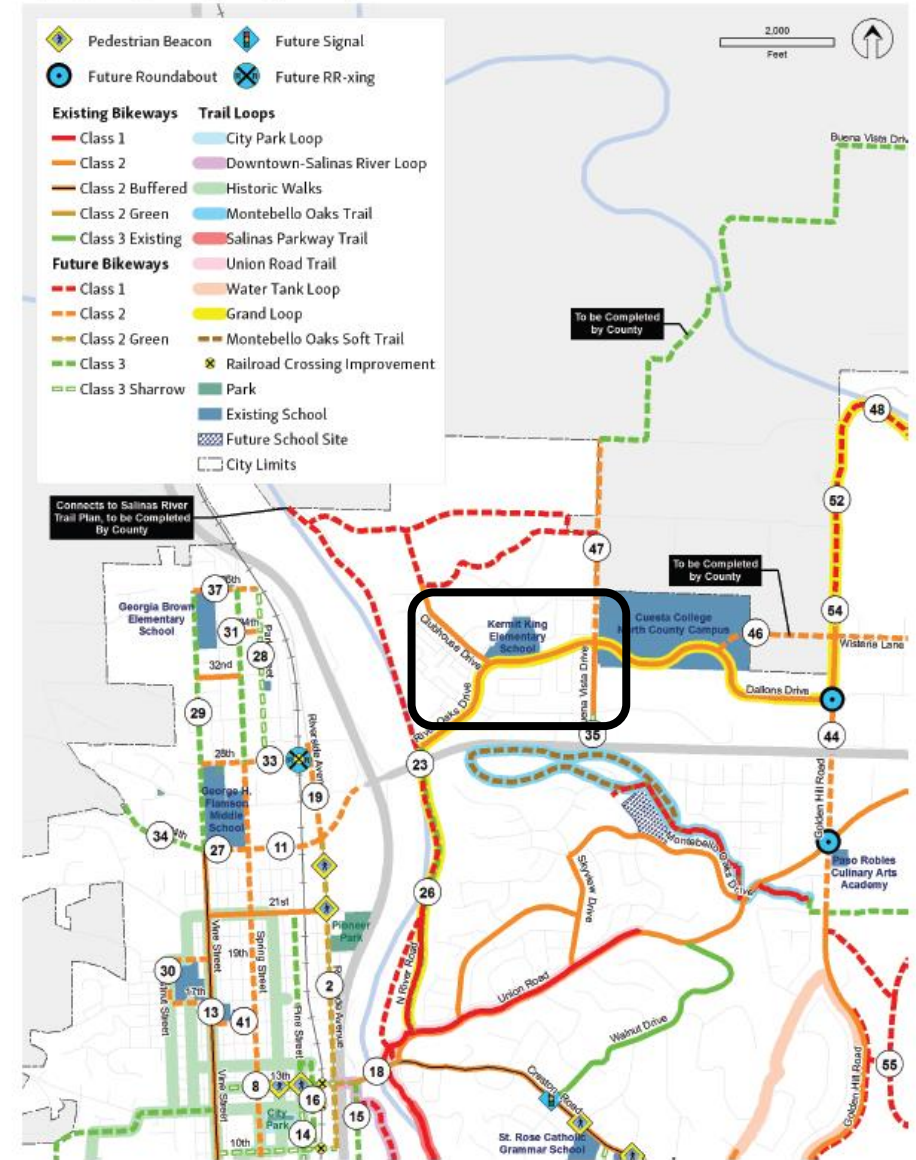
Traditions at River Oaks (Paso Robles)

- Develop in the early 2005 for high end buyers
- Extensive on-site AMI, but some want to cycle off-site
- City did not consider OACs in 2018 BMP

The trail is 3.5 miles away on a 2-lane road with no shoulders. Residents who use the trail want improved access. Also want a sidepath to downtown. Class 1 bikeway proposed in 2018 Bicycle Master Plan.



Figure 5-2: Proposed Bicycle Projects - Map 1

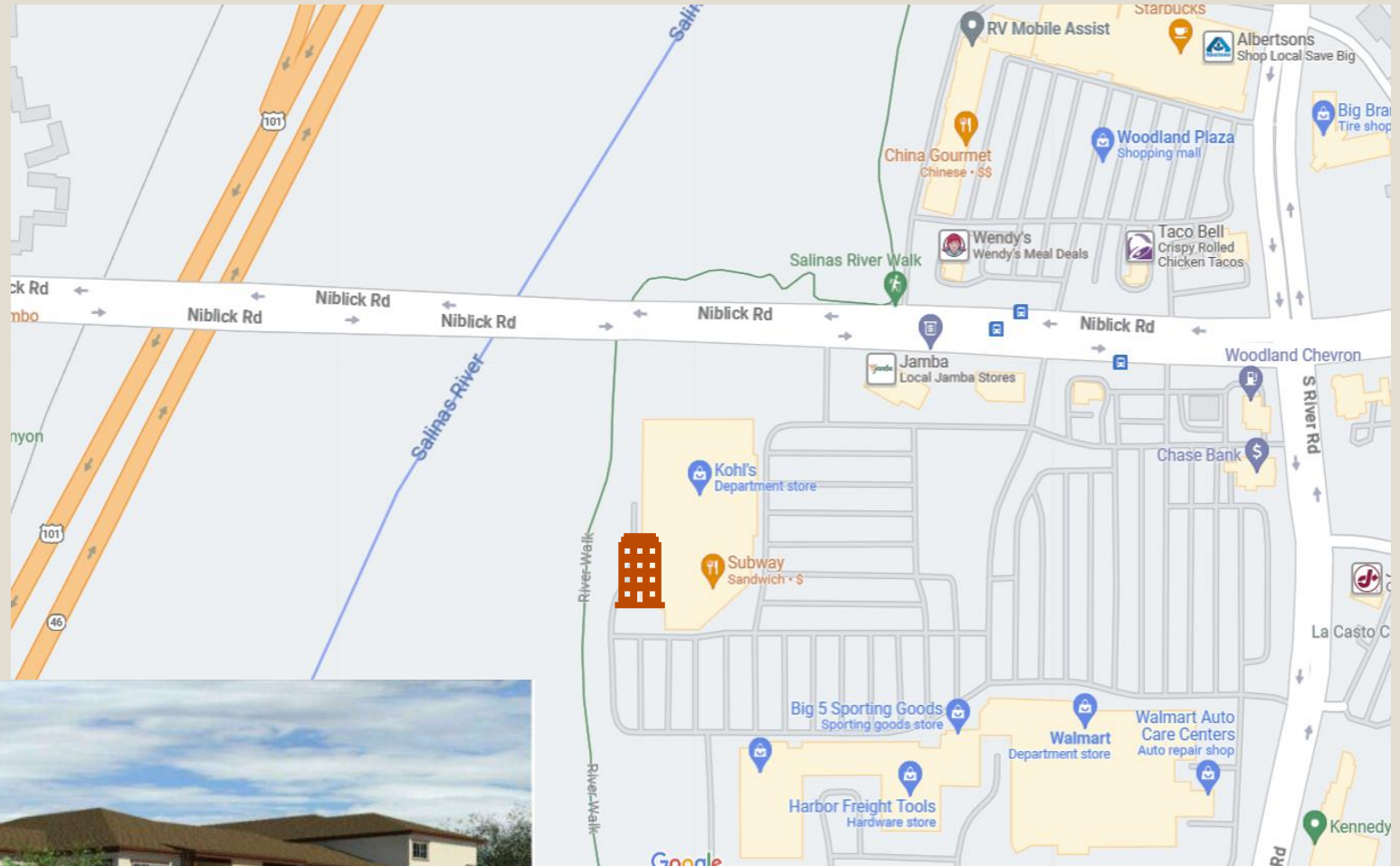


What about trails and access to them?

River Walk Terrace (Paso Robles)

- Planned older adult low-income apartment building.
- Target occupancy in mid-2020's.
- Satisfies County's need for low-income housing.
- Sited near shopping, transit, river trail.

New access pathway planned. Bike parking included on the site plan; not sure if it will be added.





*“The older I get, the
more I need safer and
more comfortable
circumstances to cycle.”*

--Joan, aged 87

Key Trails Take-away

Learning about older cyclists' habits, preferences, and experiences is important in creating cycling facilities that they will use to stay active and healthy & policies and programs that support continued cycling.



4 Important Considerations *(segue to James's presentation)*

- Focus on mobility and wellness outcomes *(where does your work fit in to this?)*
- Use an interdisciplinary approach
- Use an inclusive approach
- Be open to facility design and operation adaptation *(Stop building infrastructure for other ages, then expect older adults to learn how to use it. Build infrastructure that fits the needs of older adults.)*



Thank you

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dblTilde CORE

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References



- [Link to Year 4 survey](#)
- [Slides of MTI webinar reviewing the 50+ Cycling Survey, Year 4](#)
- [Video of Ageism is Cycling Infrastructure Planning](#)
- [Video of Pedestrian Signal Timing](#)



Report on 50+ Cycling Survey, Year 4 to be available in the fall 2023 from MTI