

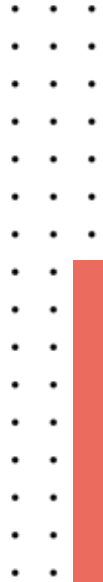
A photograph of the Walnut Street Bridge, a large steel truss bridge with multiple concrete piers, spanning a wide river. The bridge is reflected in the water. The sky is clear and blue, and there are some trees visible in the foreground and background. The text is overlaid on a semi-transparent white rectangular area.

WALNUT STREET BRIDGE  
IMPACT STUDY  
RESULTS

SAVANNAH WARD, UTC & CARTA  
ERIC ASBOE, CITY OF CHATTANOOGA

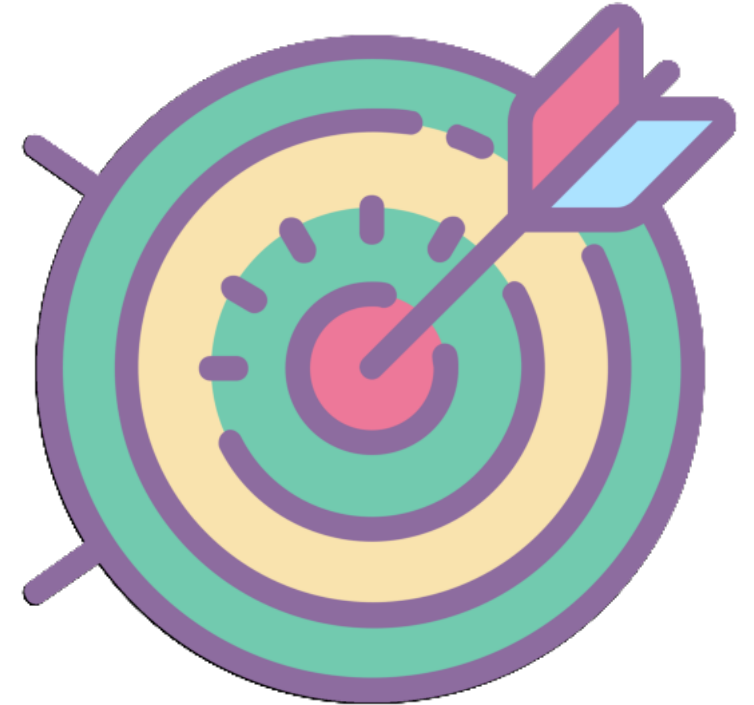
# OBJECTIVES

- Background Information
- Survey Design
- Results
- Challenges
- Next Steps



# GOAL

- To present and examine the survey results





**Walnut Street Bridge will be temporarily CLOSING for major maintenance and repairs.**

**The time and length of the closure are not finalized but it could be up to 18 months.**

**Let us know your thoughts about:**

- **How the closure will impact you**
- **Your safety concerns**

**TAKE THE SURVEY!**



**SCAN ME**



Savannah Ward, T.T.S., MPH(c) (VVT619@mocs.utc.edu) and Dr. Marissa McElrone, PhD, RDN (Marissa-McElrone@utc.edu or 423-425- 4432)  
IRB Protocol # 23-041  
This research has been reviewed and approved by the UTC IRB. IRB email address: instrb@utc.edu



# IS THE BRIDGE CLOSING?

The Chattanooga Department of Public Works has stated that it will be shutting down the Walnut Street pedestrian bridge in 2023 for repairs.

A spokesperson for the mayor's office has announced that the Walnut Street pedestrian bridge will be shut down for extensive repairs in 2023. The Department of Public Works is still finalizing the exact dates the repairs will take place on.

University  
Echo,  
October  
25, 2022

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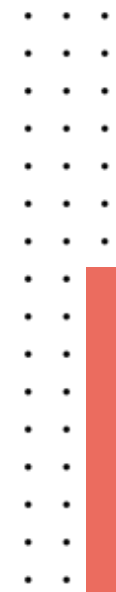
The Walnut Street Bridge will close for repairs next year.

A spokesperson for Mayor Tim Kelly says extensive repairs are planned for 2023.

Right now, Chattanooga Public Works is finalizing the exact project dates.

Stay with the Local 3 News app for updates to this developing story.

Local 3  
News,  
October  
11, 2022



# SINCE THE SURVEY

Ewalt says sandblasting, repainting, and replacing portions of the bridge may cause temporary shutdowns, but there isn't a set timeline. Ewalt says the first step will be finding a construction partner, to begin repairs.

While some minor shut-downs will occur, they city says they will help create alternate routes, for Chattanooga residents who use the bridge to commute to work.

*“We'll do everything we can to mitigate construction impact, but there will likely be at least some kind of closure involved,” says Ewalt.*

Fox Chattanooga,  
May 4, 2023



# SINCE THE SURVEY

"It's kind of like our Eiffel Tower," Kelly said about the bridge. "We're happy to have the federal support, but it's an icon that Chattanoogaans have grown to love, and it's time. The decking is rotting, and it's got to be stripped and sandblasted and repainted. It's something we've been putting off for quite some time."

Chattanooga  
Times Free Press,  
May 2, 2023





# ALLOCATED FUNDING (TIP)

TIP Project Report  
10/3/2023

<b>Last Revision</b> Amendment 38	<b>Revision Date</b> 10/02/2023		
<b>TIP ID</b>	<b>PIN #</b>	<b>Length in Miles</b>	<b>Lead Agency</b>
CHC WALNUTMAINT	128099.00		Chattanooga
<b>State</b>	<b>County</b>		
TN	Hamilton		
<b>State Route</b>	<b>Total Project Cost</b>		
	\$31,311,800		
<b>Project Name</b>			
Walnut Street Bridge Maintenance			
<b>Termini</b>			
from Walnut Street and 1st Street to Walnut Street and Frazier Ave			
<b>Project Description</b>			
Rehabilitation of the Walnut Street Bridge including structural member repair, deck repair and blasting/repainting.			
<b>Long Range Plan #</b>		<b>Conformity Status</b>	
Appendix D: Set-asides		Not Applicable	

FY	Phase	Funding	Programmed Funds	Fed Funds	State Fund	Local Funds
2023	PE/ROW/CONST	STBG-M	\$17,327,353	\$13,861,882	\$0	\$3,465,471
2023	CONST	DEMO	\$6,250,000	\$5,000,000	\$0	\$1,250,000
2023	CONST	LOCAL	\$7,734,447	\$0	\$0	\$7,734,447
<b>Total</b>			<b>\$31,311,800</b>	<b>\$18,861,882</b>	<b>\$0</b>	<b>\$12,449,918</b>

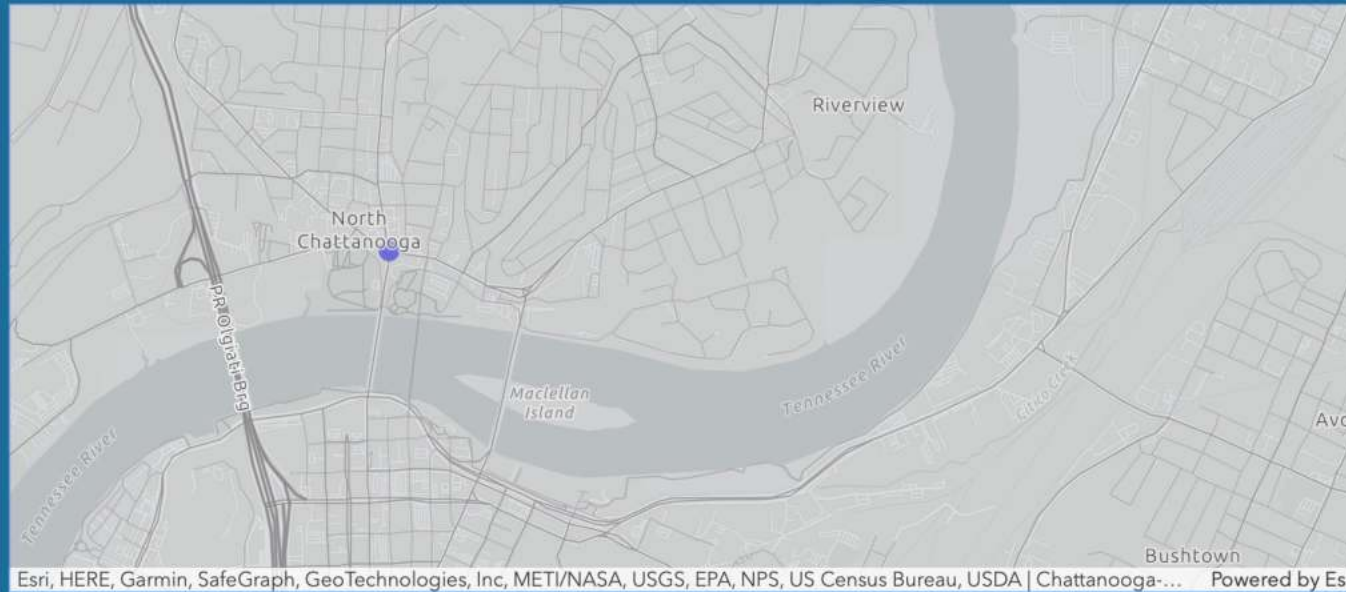


# N. MARKET ST & FRAZIER AVE

Bicycle & Pedestrian Count Program - Spring 2023  
Chattanooga-Hamilton County/N. Georgia TPO

Select Time Frame  
All Days

- Mabel St. & Battery Pl.
- Manufacturers Rd
- Market St. & Main St.
- Market St. & MLK Blvd.
- McCallie Ave. & S. Willow St.
- McCallie Ave. & University Greenway
- N. Market St. & Bell Ave.
- N. Market St. & Frazier
- South Chick Greenway & Bonnieway Dr
- Tennessee St. & Nashville St.
- Tombras & Ringgold Rd
- Van Cleeve St. & Greenway
- Virginia Ave & 45th St



Pedestrians

**6.5k**

Bicyclist

**751**

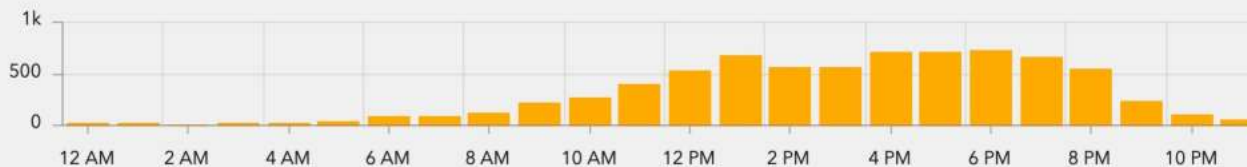
Scooters

**21**

Wheelchairs

**12**

## ALL MODES



All Modes    **Pedestrians**    Bicyclist    Scooters    Wheelchairs







# CONCERNS

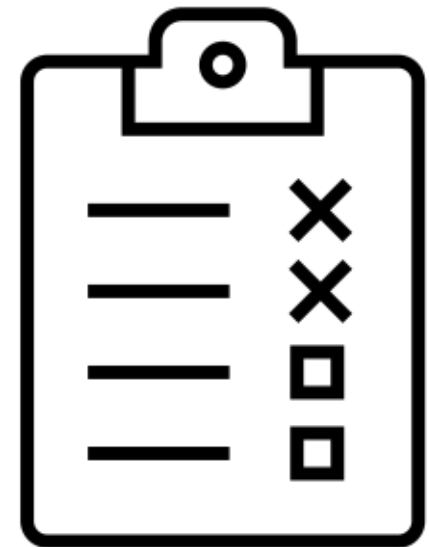


- Active Transportation
  - How is the potential closure going to impact physical activity?
- Impact and Safety
  - How is the potential closure going to impact users and will it create safety concerns?
- Alternative Route(s)
  - Which bridge is preferred to be used as an alternative pathway, and should/can it be reconfigured (and how)?

*What are the impacts and safety concerns around the displaced Walnut Street Bridge users?*

# NEEDS ASSESSMENT

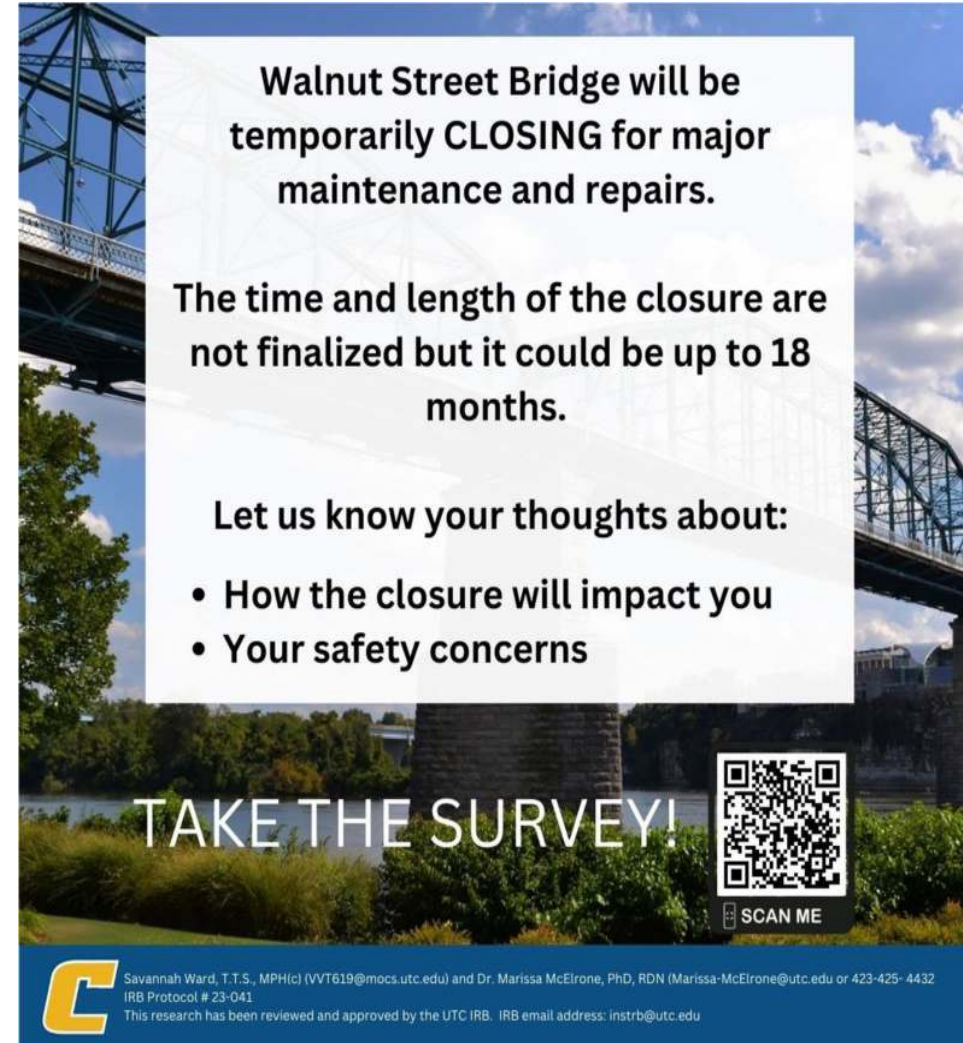
- Understand the potential impacts on physical activity
- Identify alternative active transportation corridors
- Assess safety concerns of displaced bicycle and pedestrian foot traffic during the potential closure





# SURVEY

- 17 open- and closed-ended questions
- Open from 3/7 to 3/14, social media campaign
- 579 completed surveys
  
- Population size (2021): 182,113
- Sample size: 384
- Confidence Level: 95%
- Margin of error: 5%




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**TAKE THE SURVEY!**

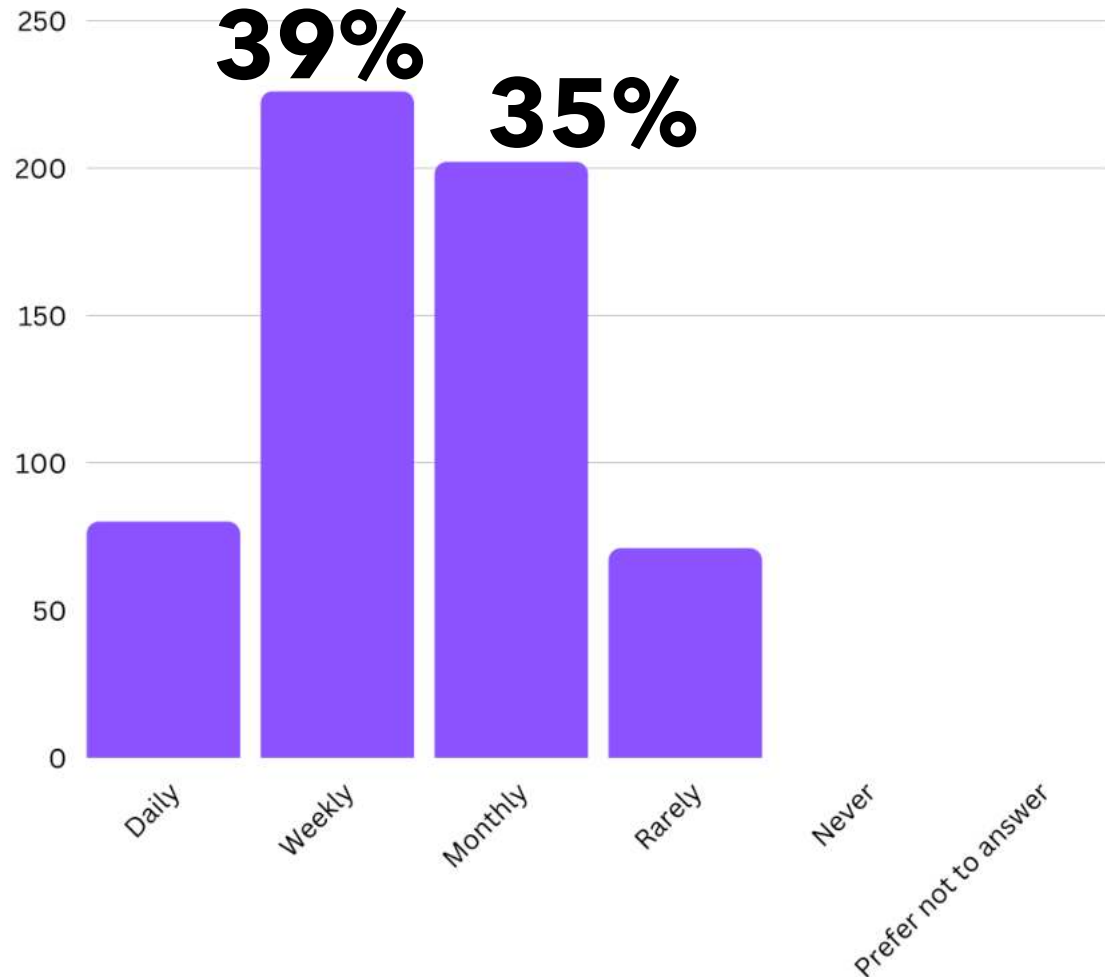


SCAN ME

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# RESULTS

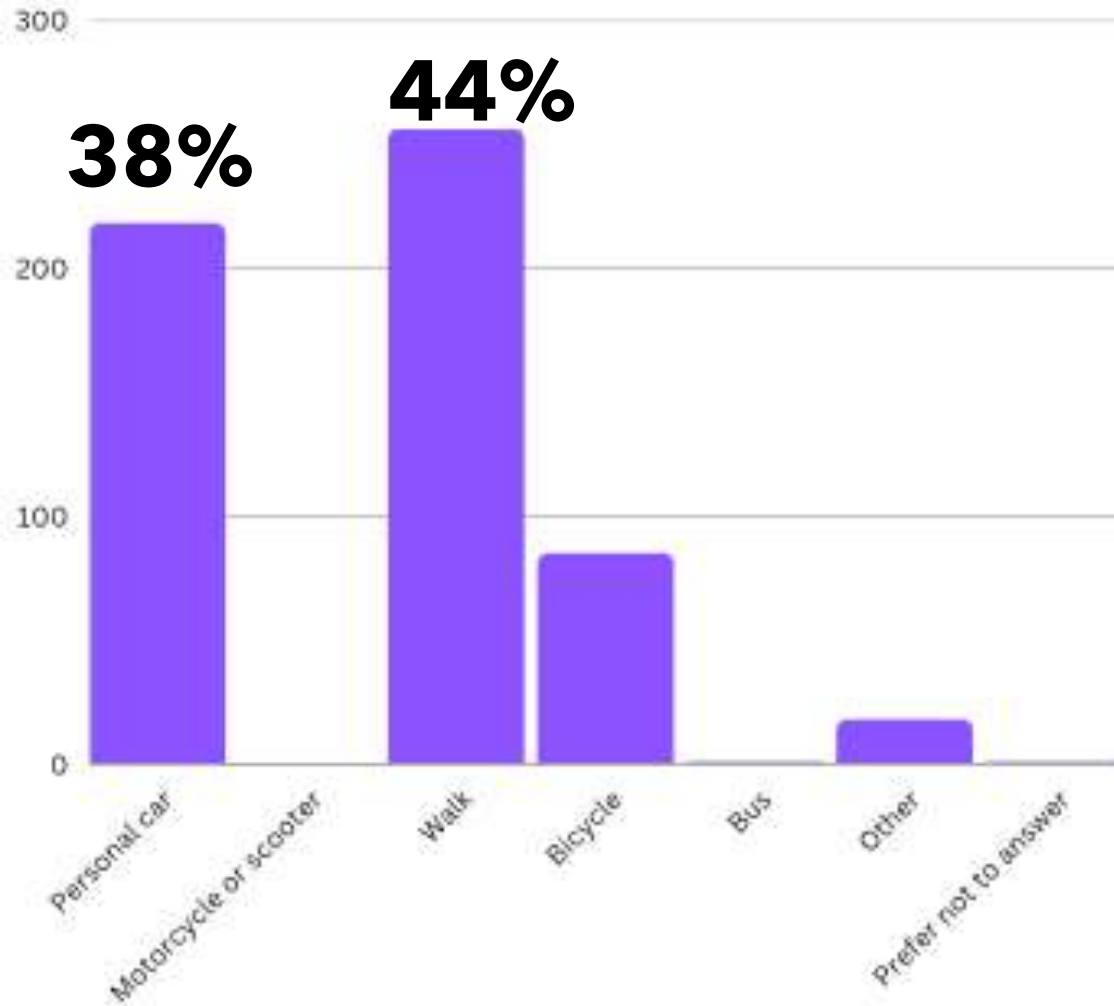
Q 1



- How often do you use Walnut Street Bridge (i.e., "walking bridge") in Chattanooga, Tennessee?



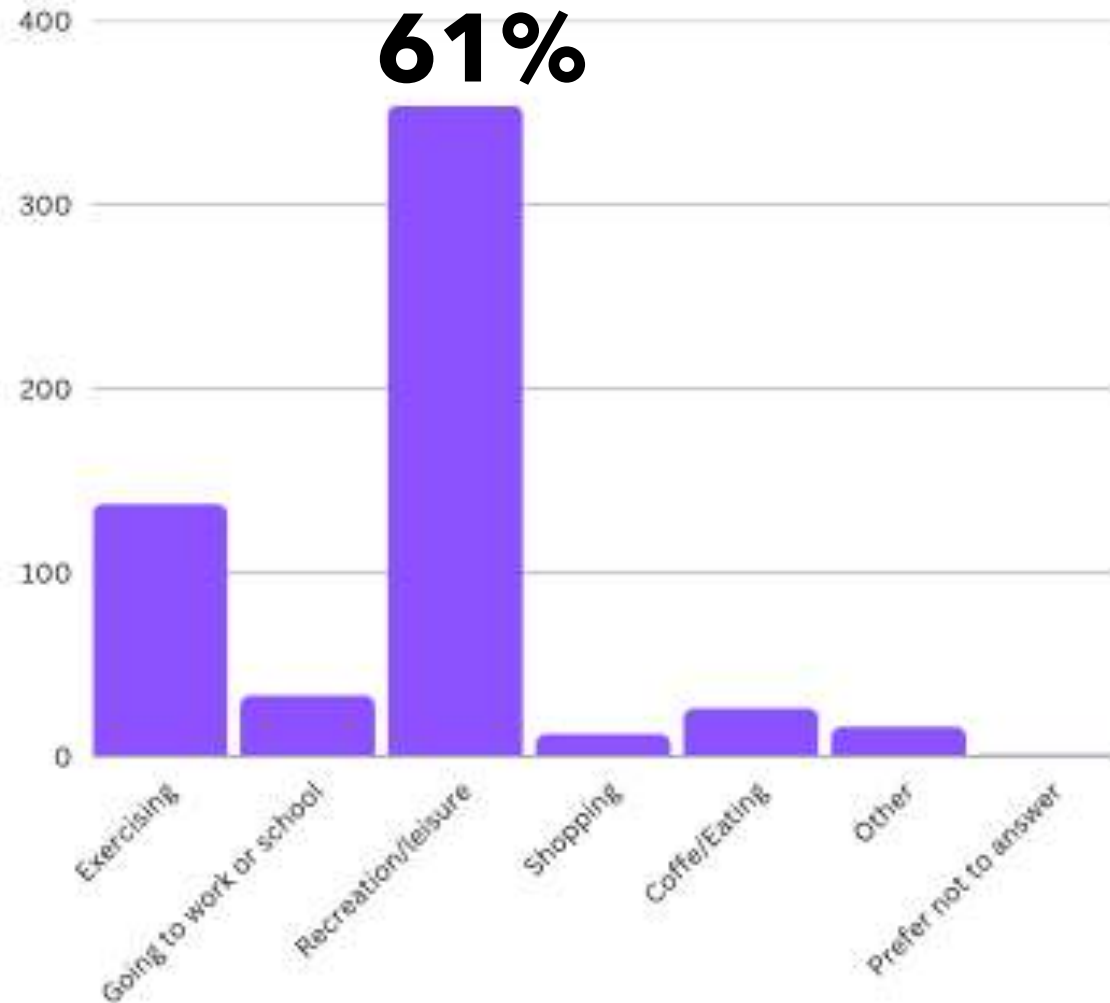
## Q 2



- How do you typically travel to the **Walnut Street Bridge** (i.e., "walking bridge") in Chattanooga, Tennessee?



# Q 3

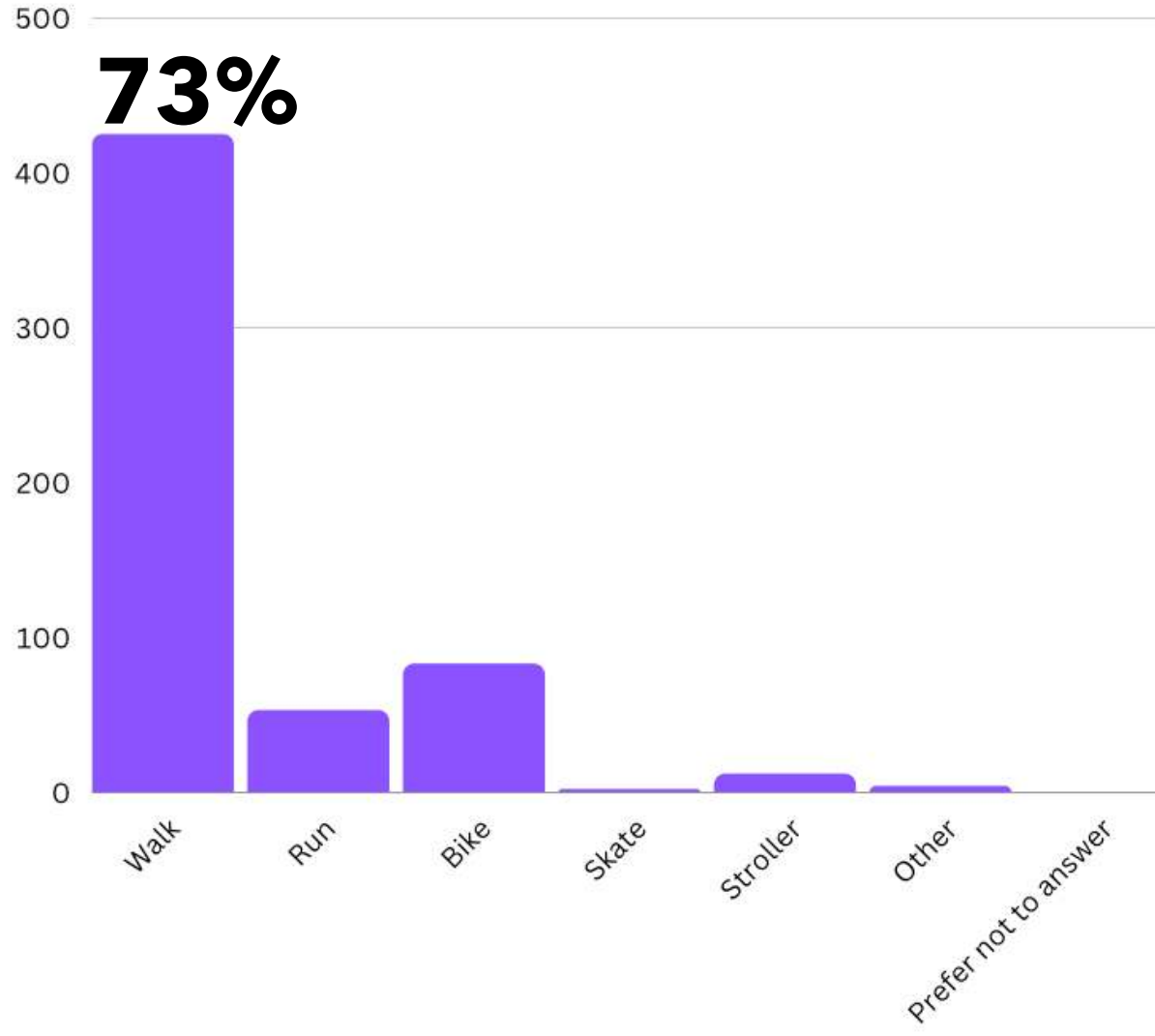


- What best describes why you typically use the **Walnut Street Bridge** (i.e., "walking bridge") in Chattanooga, Tennessee?





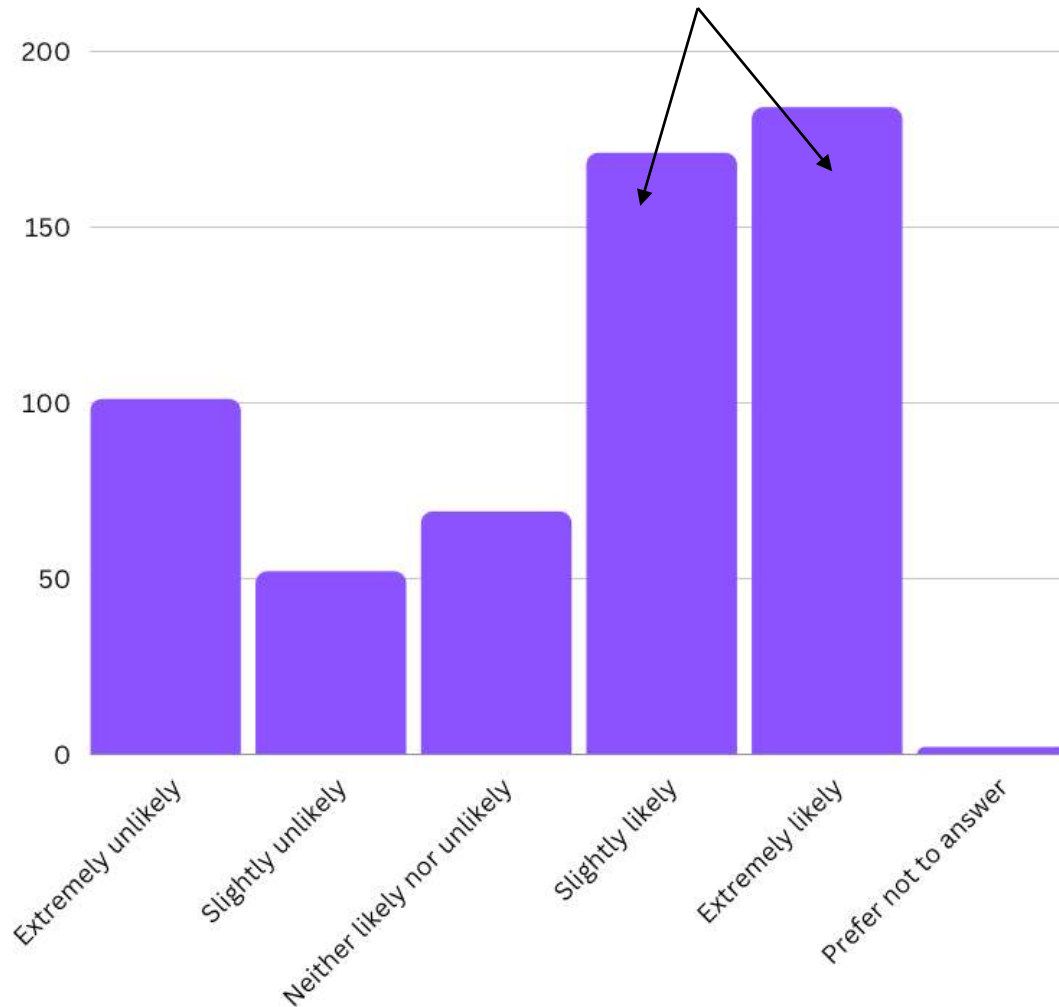
# Q 4



- What type of activity do you do most often on the **Walnut Street Bridge** (i.e., "walking bridge") in Chattanooga, Tennessee?

Q 5

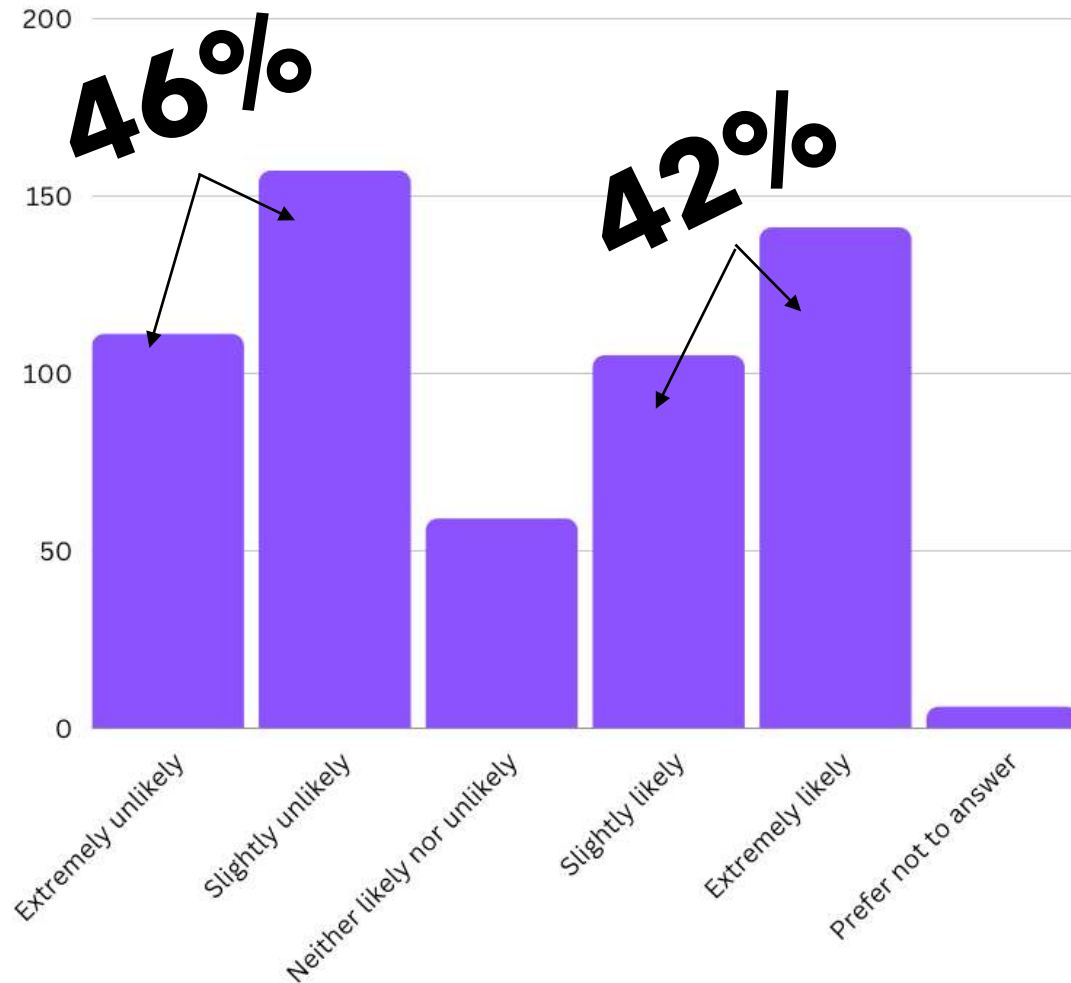
61%



- How likely is the closure of the **Walnut Street Bridge** (i.e., "walking bridge") in Chattanooga, Tennessee going to impact your **physical activity level**?



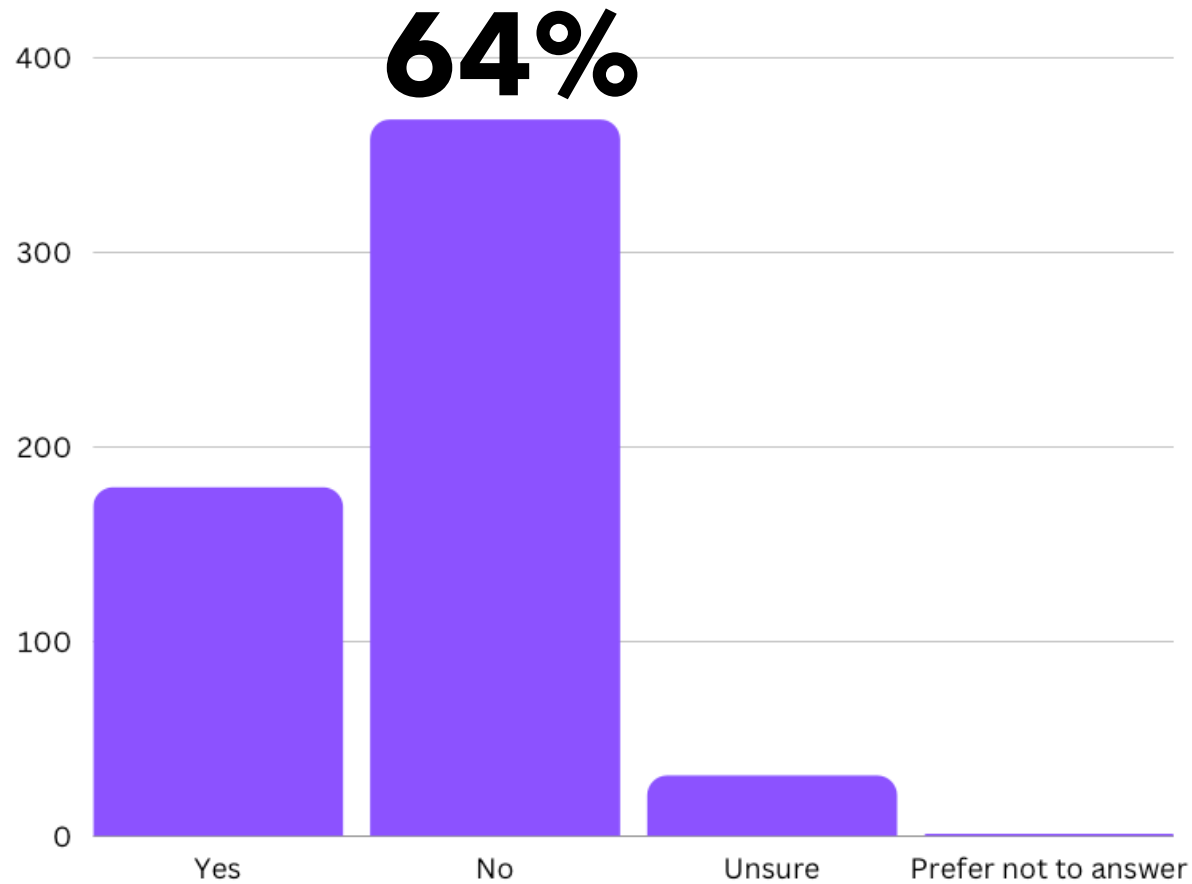
## Q 6



- How likely are you to continue biking, walking, running, etc. in the Northshore or downtown area during the closure of the Walnut Street Bridge (i.e., "walking bridge") in Chattanooga, Tennessee?



Q 7



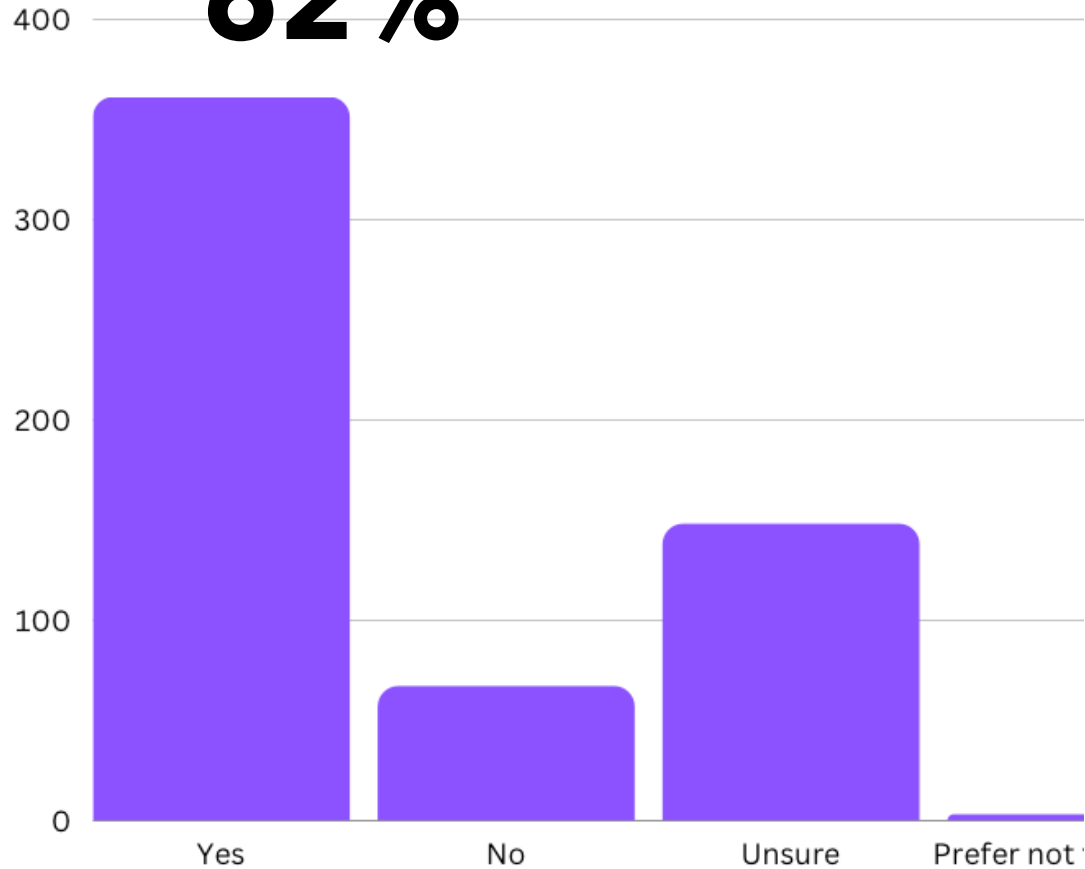
- Do you feel safe walking, biking, or running across **Market Street Bridge** in Chattanooga, Tennessee?





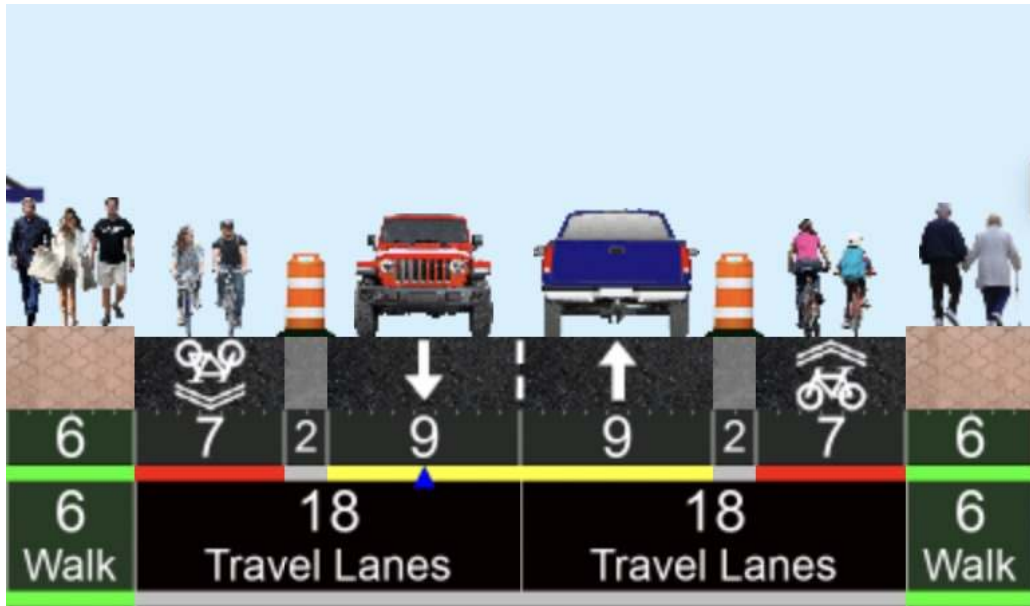
Q 8

62%



- Would you feel safe walking, biking, or running across the **Market Street Bridge** if there were **increased safety measures** taken for the duration of the Walnut Street Bridge closure?

Q 9



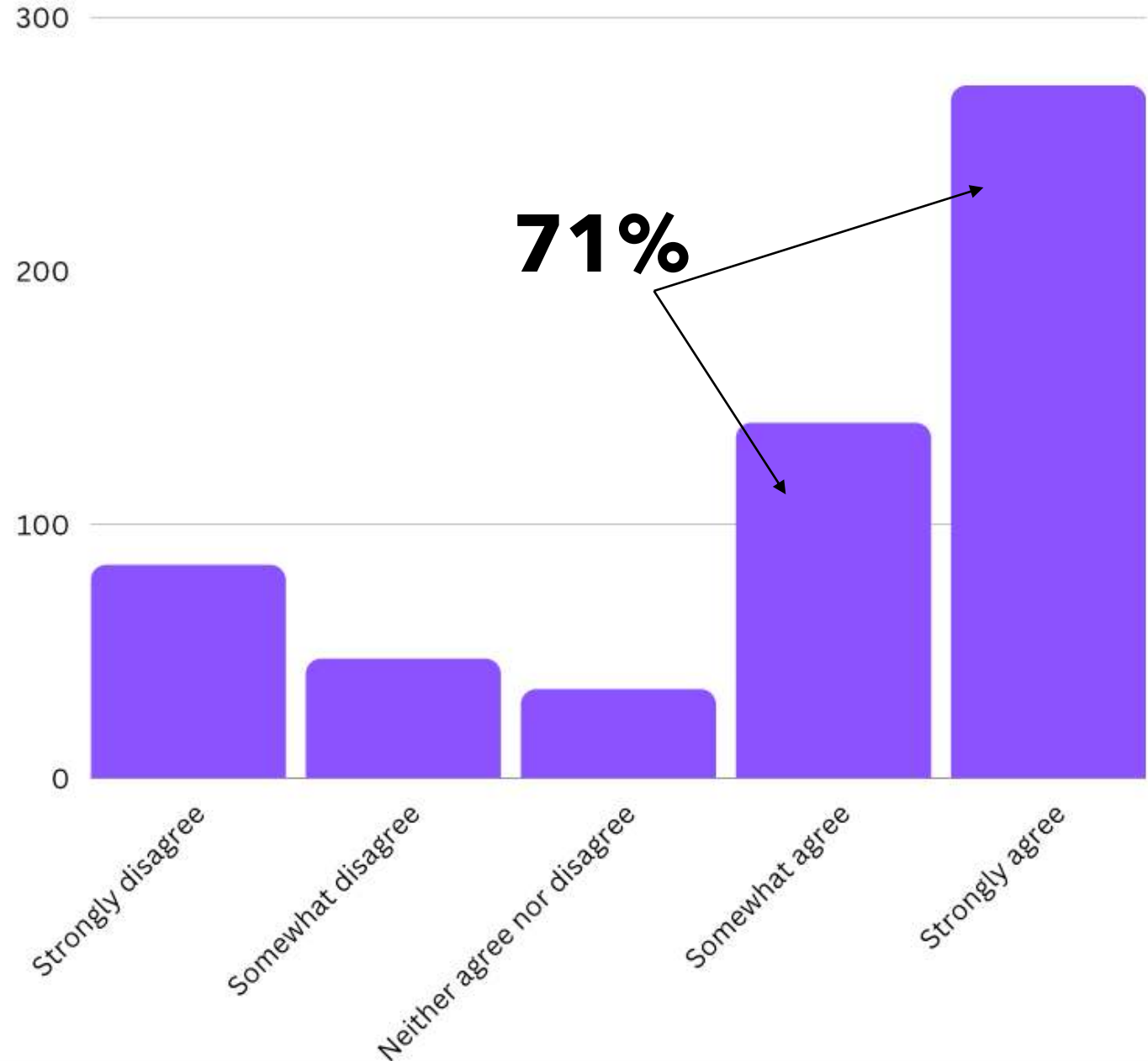
NOTE: Numbers in figure represent measurement in feet (ft)

How much do you agree with temporarily reducing the number of travel lanes on **Market Street Bridge**, from four to two lanes, with one in each direction, and adding two bicycle lanes with buffers in between the cars and bicyclists?

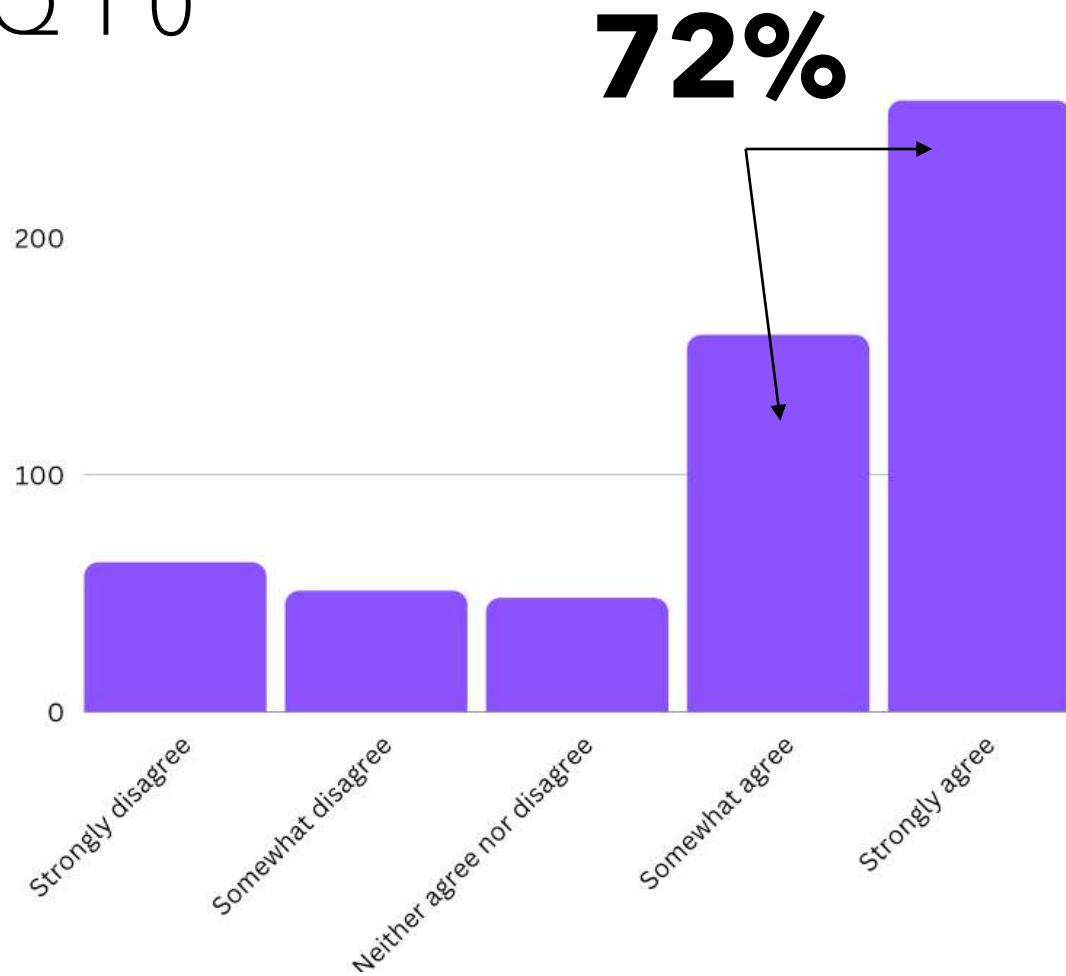


## Q9 CONT.

71% agree that Market Street Bridge **should** be temporarily reconfigured to reduce the number of driving lanes to increase safety measures for vulnerable road users.



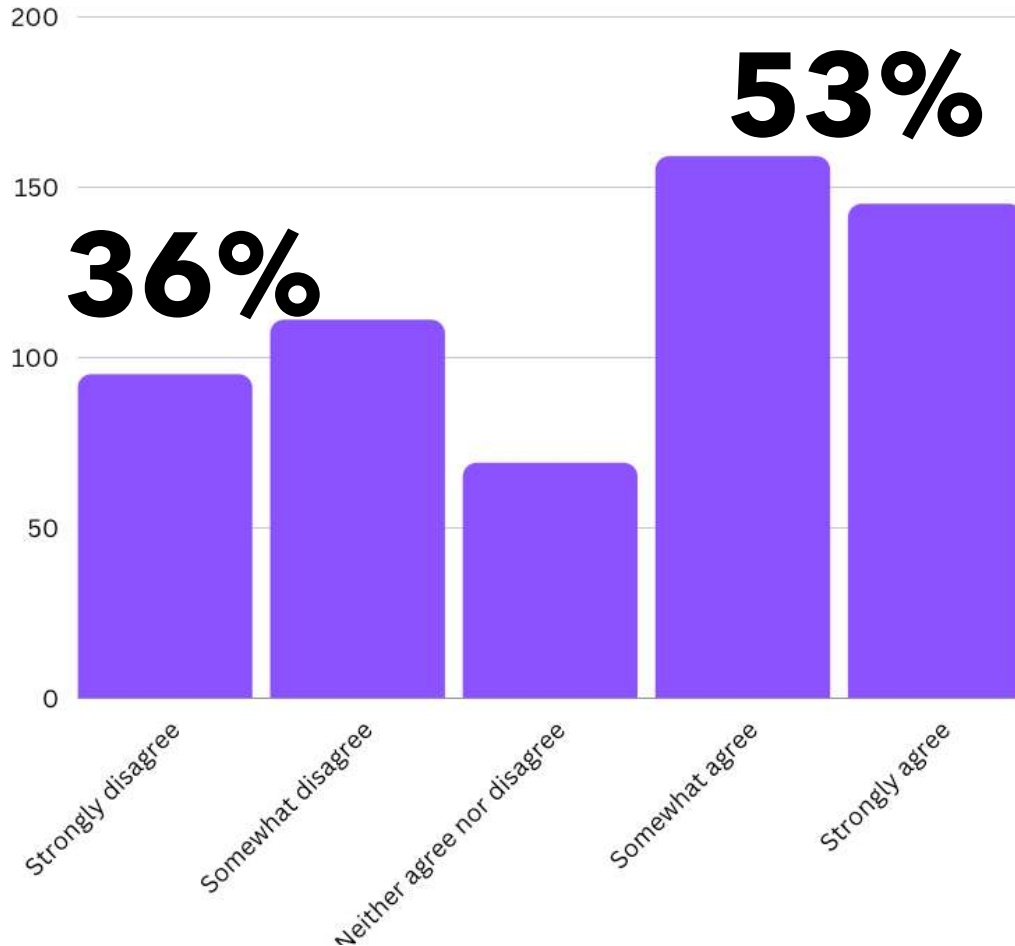
Q 1 0



- How much do you agree with temporarily reconfiguring **Market Street Bridge** as an alternative active transportation avenue during the closure of the Walnut Street Bridge (i.e., "walking bridge") in Chattanooga, Tennessee?



## Q 1 1



- How much do you agree with temporarily reconfiguring the **Veterans Memorial Bridge** as an alternative active transportation avenue during the closure of the Walnut Street Bridge (i.e., "walking bridge") in Chattanooga, Tennessee?



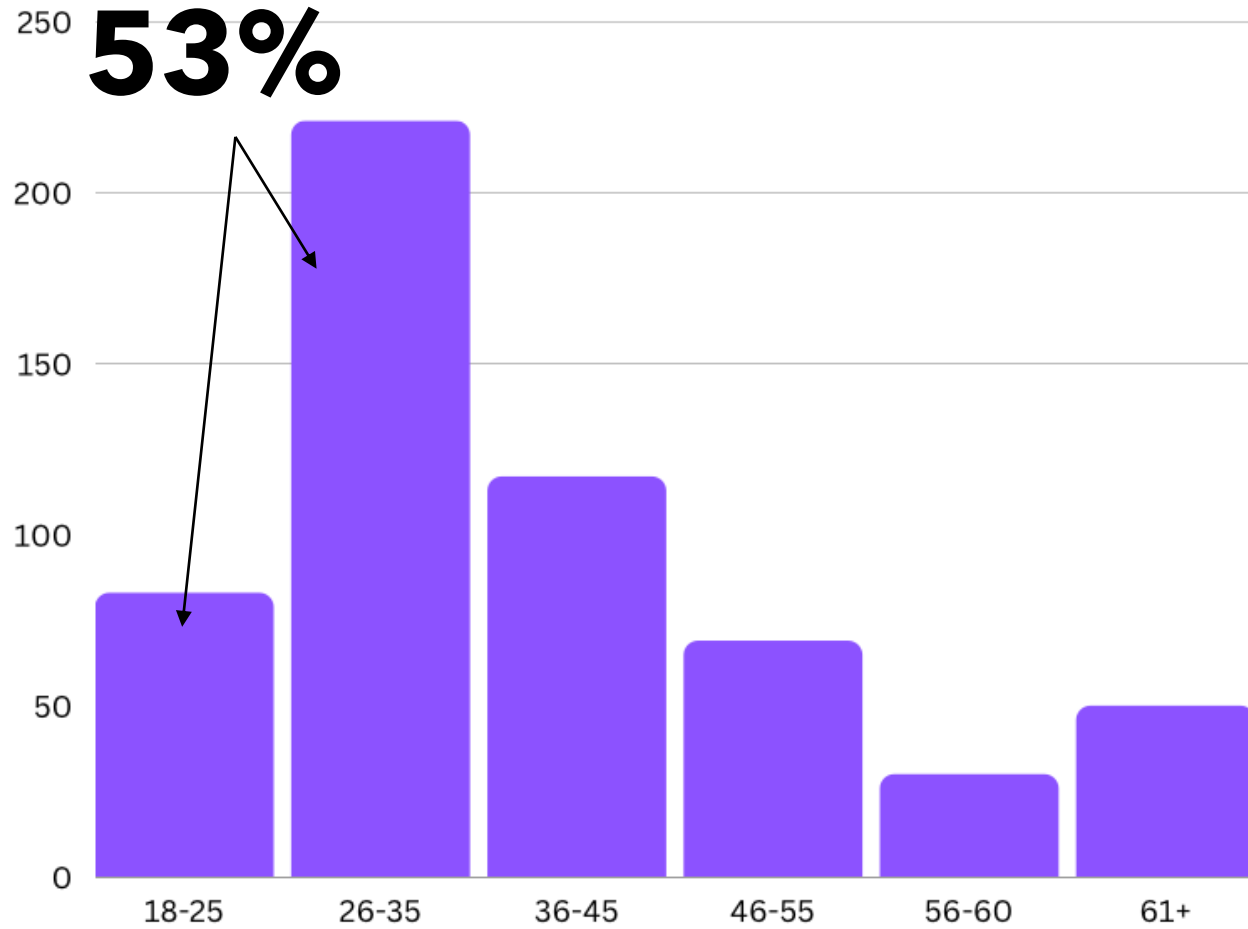
# Which bridge should be reconfigured?

<b>Market Street Bridge</b>	<b>Veterans Memorial Bridge</b>
72% Yes	53% Yes
20% No	36% No





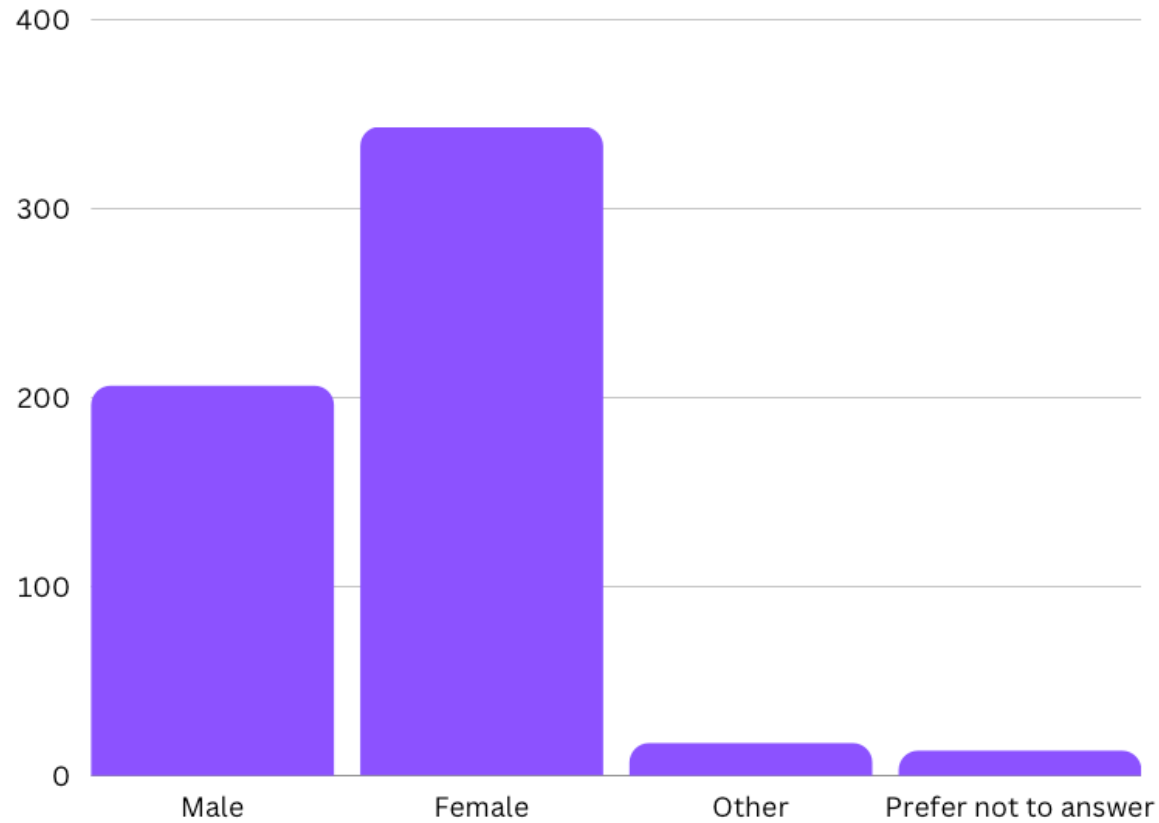
# Q 1 3



- What is your age?



# Q 1 4

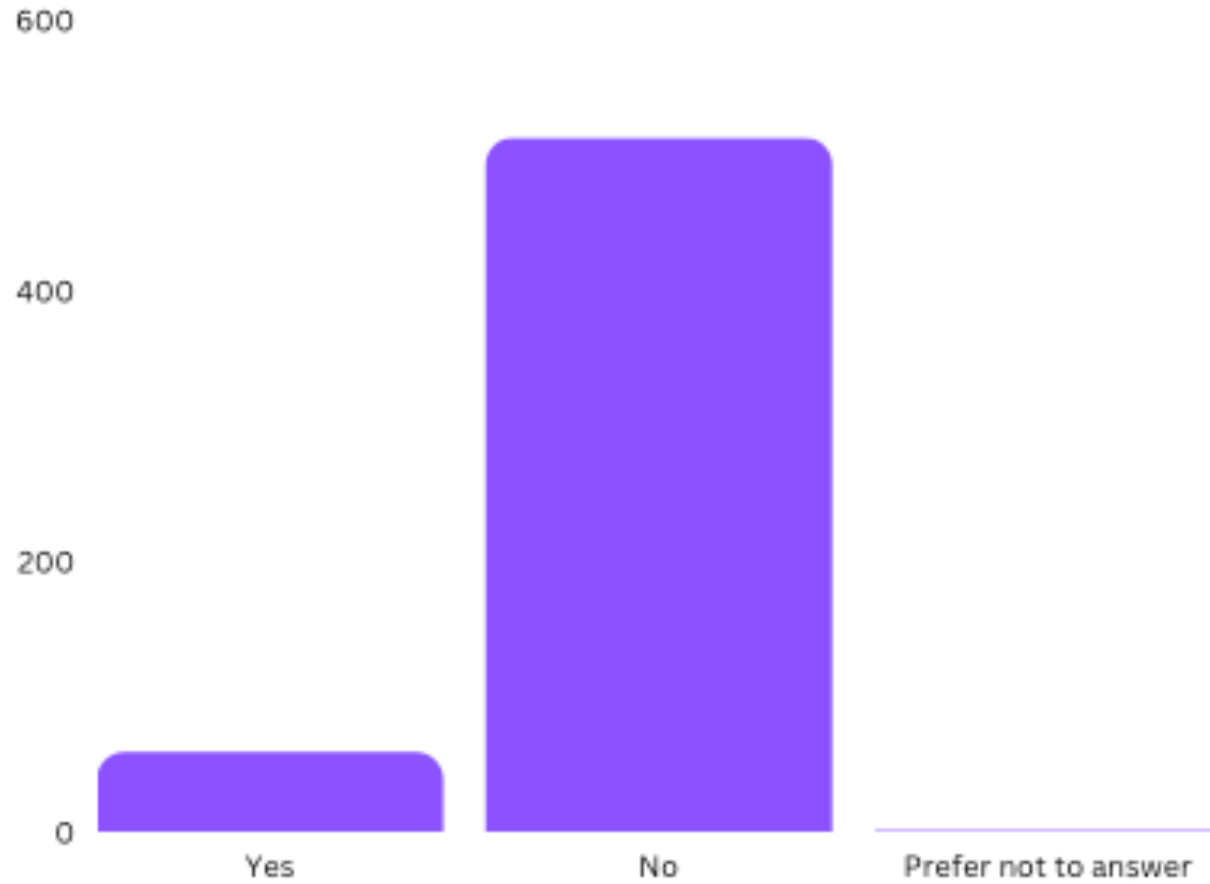


- What is your gender?





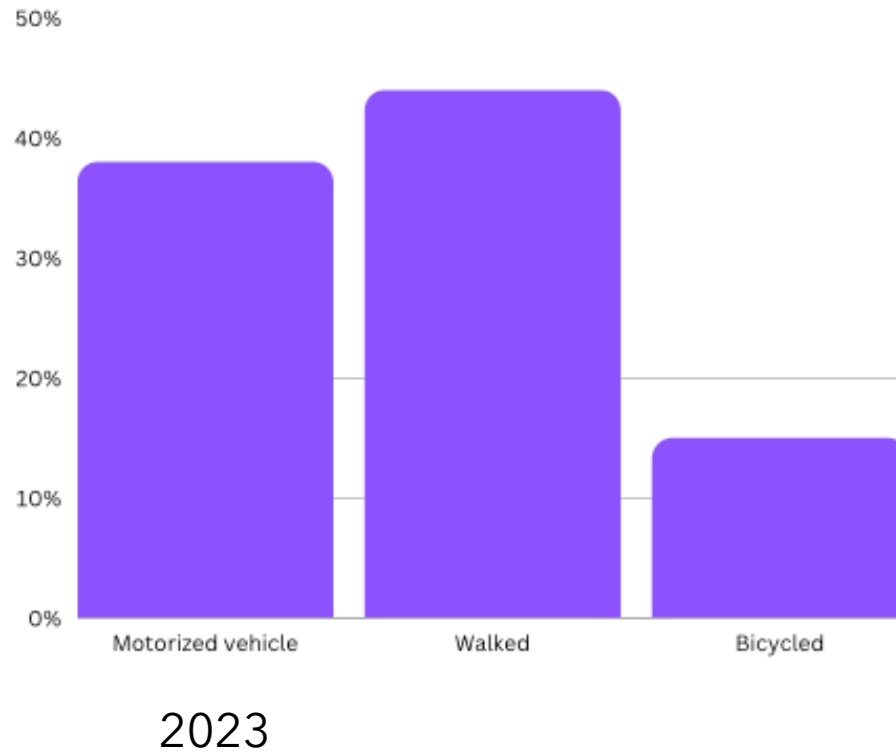
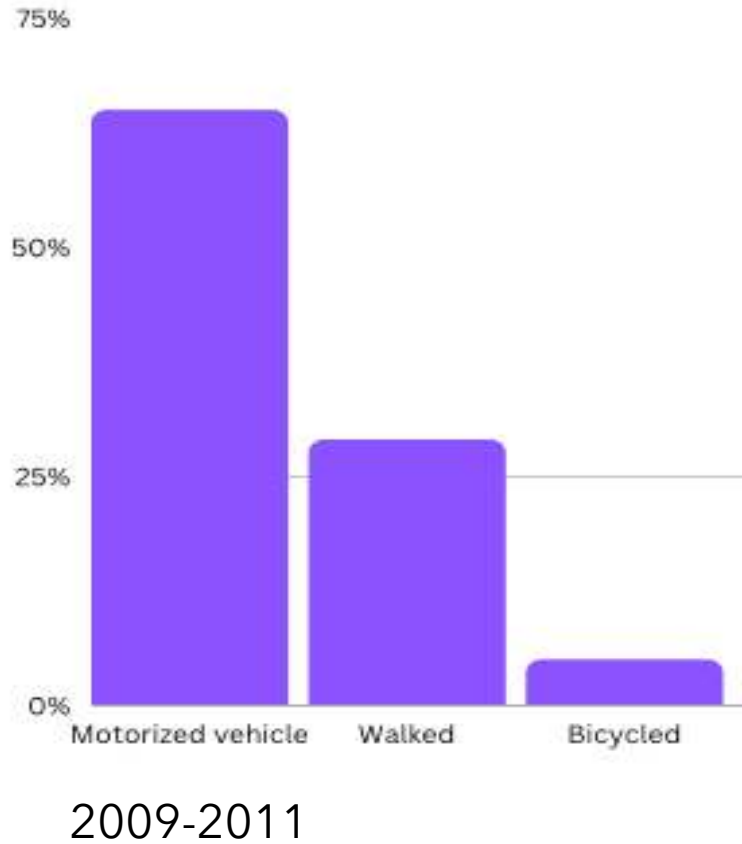
# Q 15



- Are you a student?



# HOW DO YOU TRAVEL TO THE WALNUT STREET BRIDGE?



# THEMATIC ANALYSIS

- Closure Length
- Market Street Bridge Concerns
- Reconfiguration
- Business/Tourism
- Transparency
- Traffic Concerns
- Physical Barriers





“It is mandatory to increase safety for pedestrians and bicyclists on Market Street Bridge during this time. It would be even better if this was done on BOTH Market & Veterans Bridges.”





"As someone who uses the bridge a few times a week to commute by bike it would be very helpful to have another safe route to cross the river, if there isn't a protected crossing I would probably have to return to driving which negatively impacts my health, the environment, and traffic for those who do drive."

# CHALLENGES

- Balance need for repair with impact of construction
- Limited number of river crossings
- Market Street Bridge is a state route





# WHAT'S NEXT

- Details about construction impacts and alternate routes available soon
- Sign up to receive information throughout the project



# QUESTIONS?

