



Adaptive Bike Share: Expanding Bike Share to People with Disabilities and Older Adults

1394 – Bicycling Toward Equity: Opportunities, Barriers, and Policies for Vulnerable Groups
TRB Annual Meeting - January 2020

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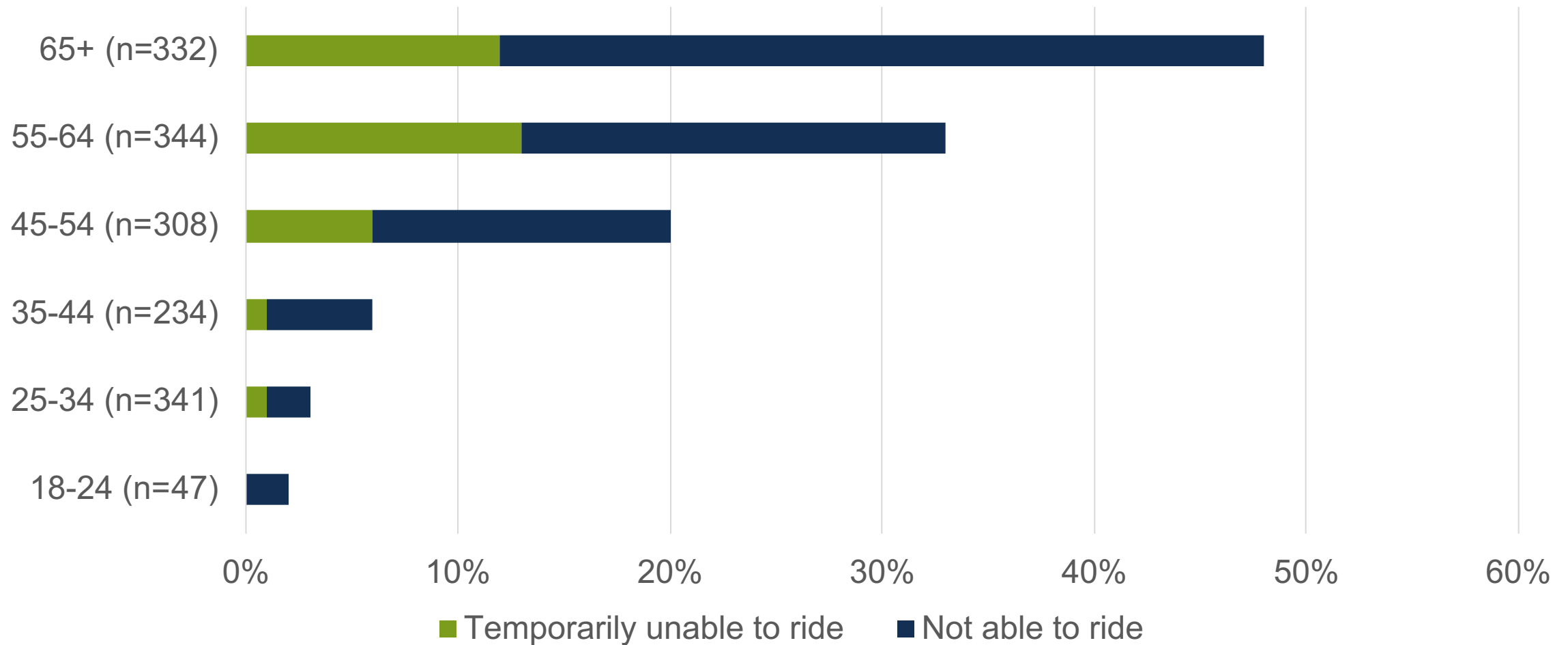
BREAKING BARRIERS TO BIKE SHARE

RESULTS FROM A RESIDENT SURVEYS

Market / Need

insights from a survey in low-income communities of color

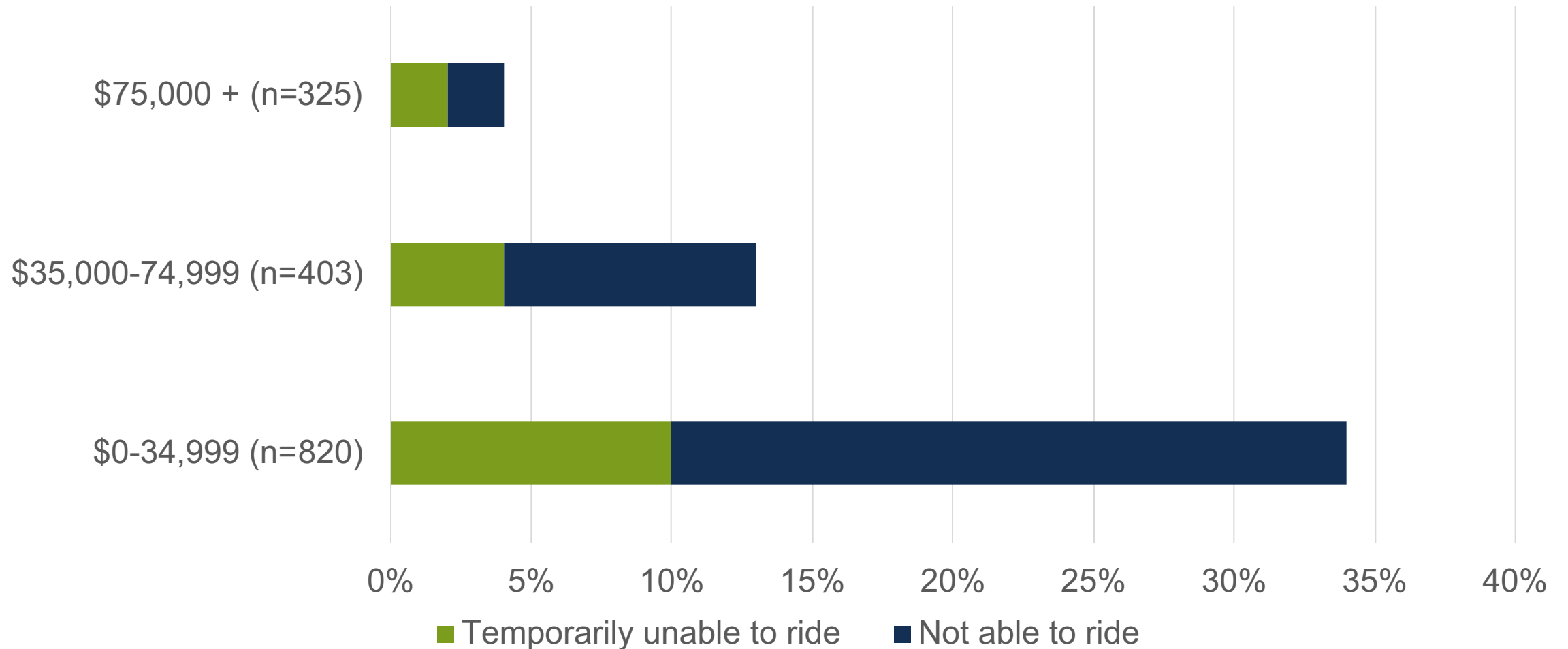
Ability to ride, by age



Market / Need

insights from a survey in low-income communities of color

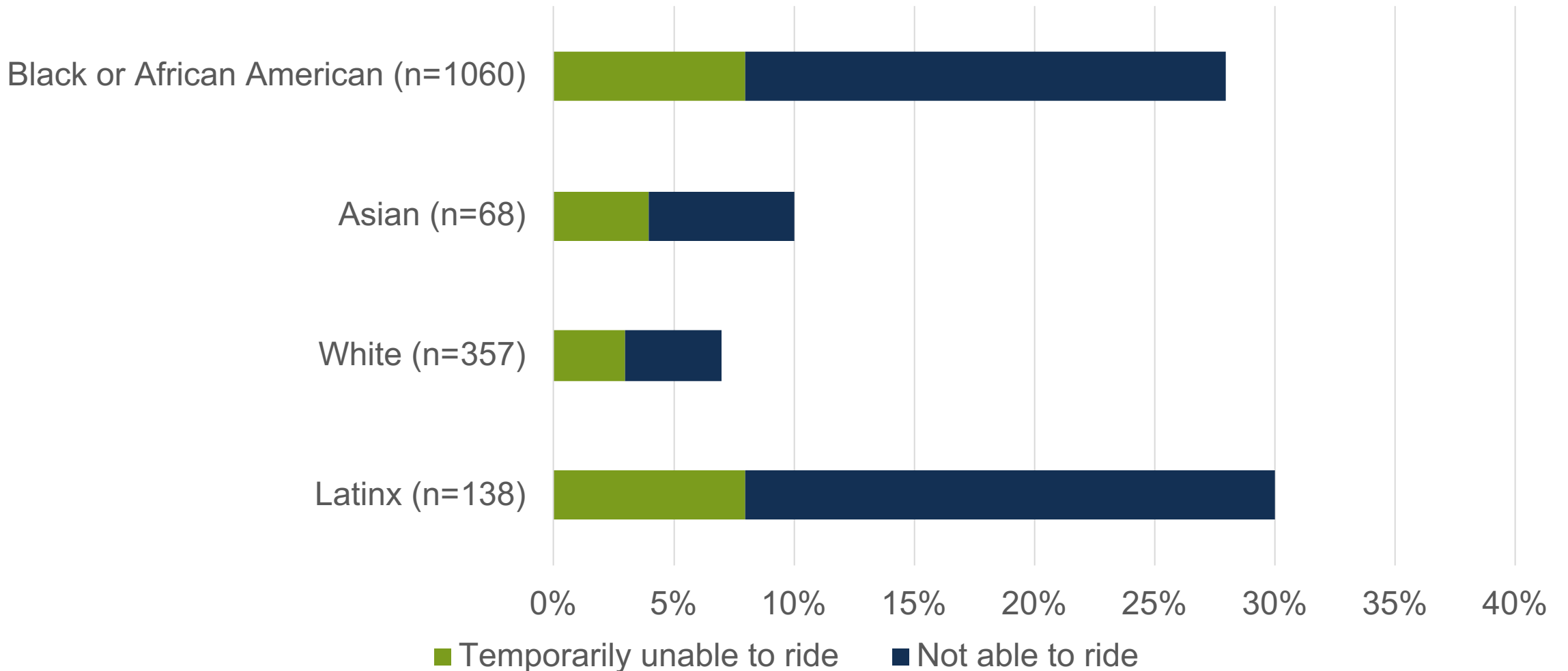
Ability to ride, by income



Market / Need

insights from a survey in low-income communities of color

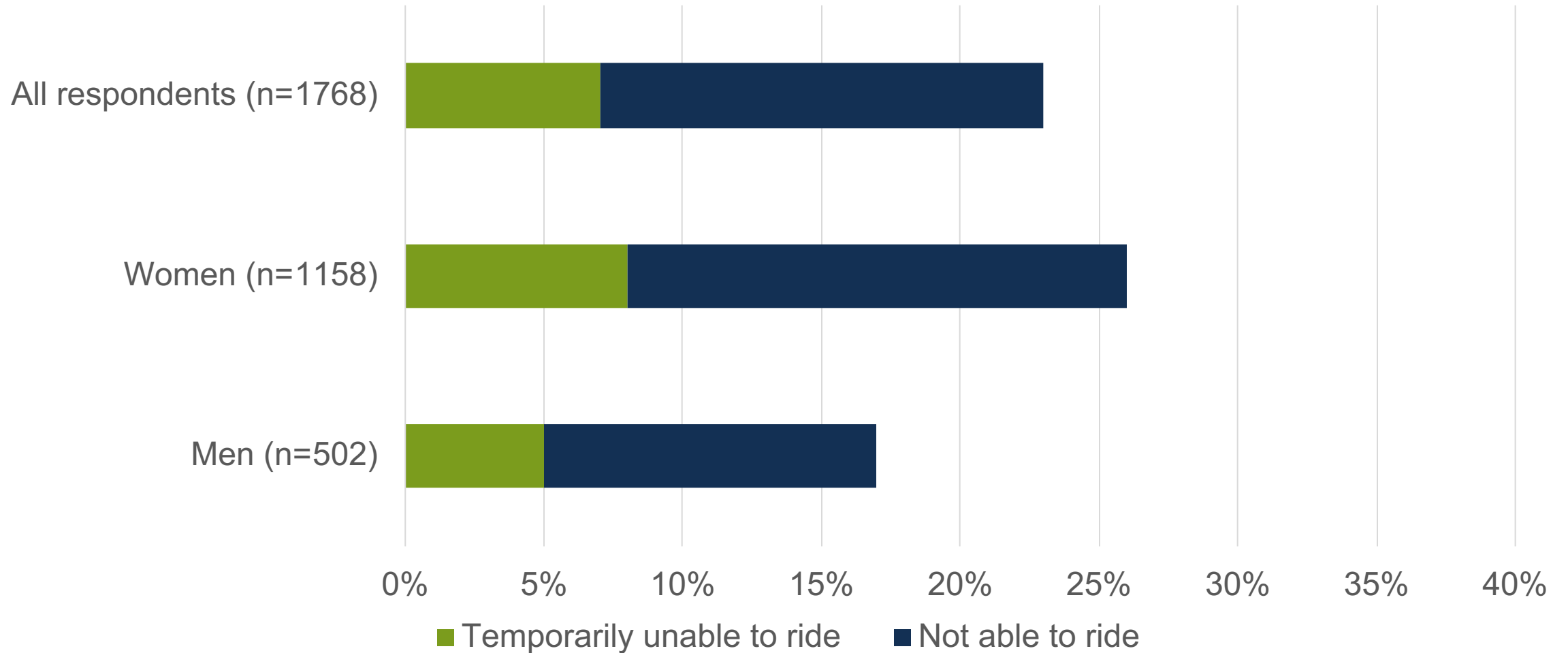
Ability to ride, by race and ethnicity



Market / Need

insights from a survey in low-income communities of color

Ability to Ride, by gender

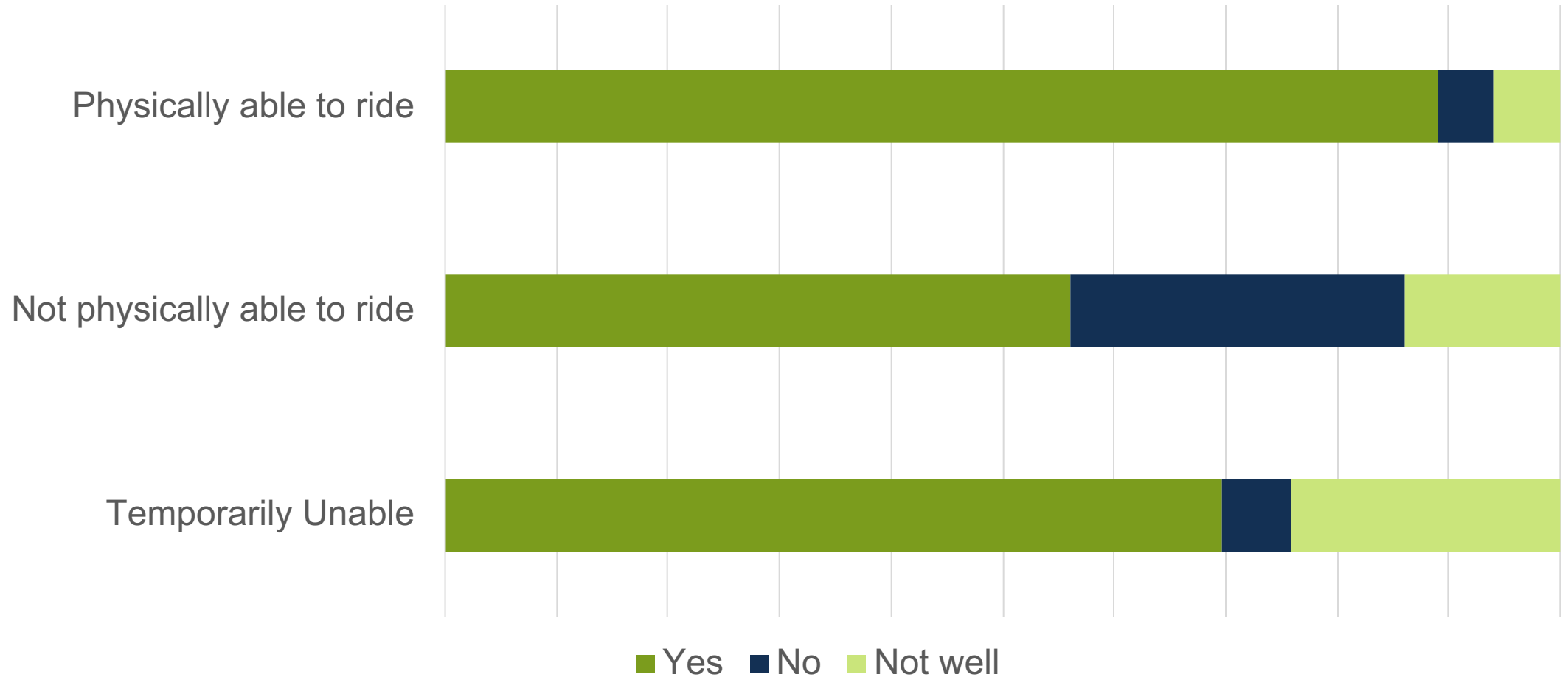


Market / Need

insights from a survey in low-income communities of color

Do you know how to ride a bike?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

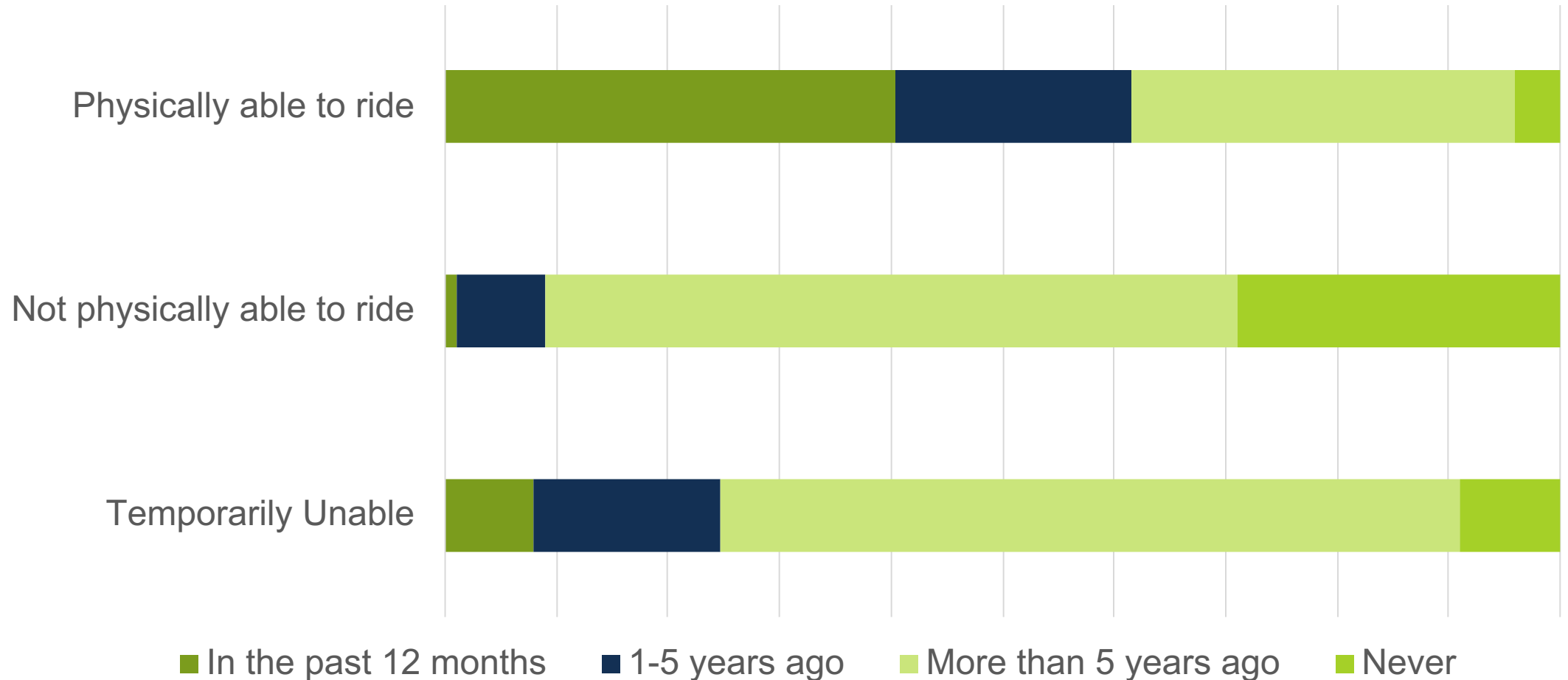


Market / Need

insights from a survey in low-income communities of color

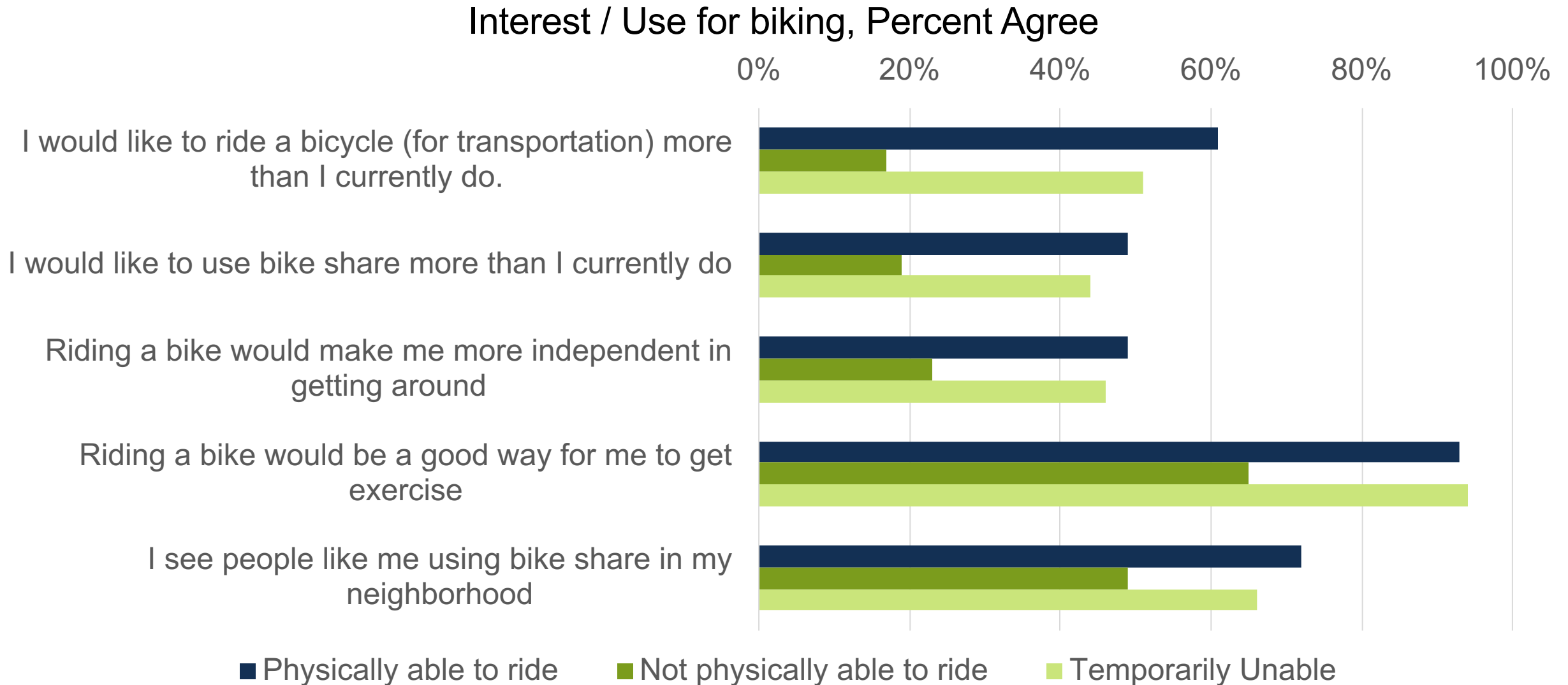
When did you last ride a bicycle?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



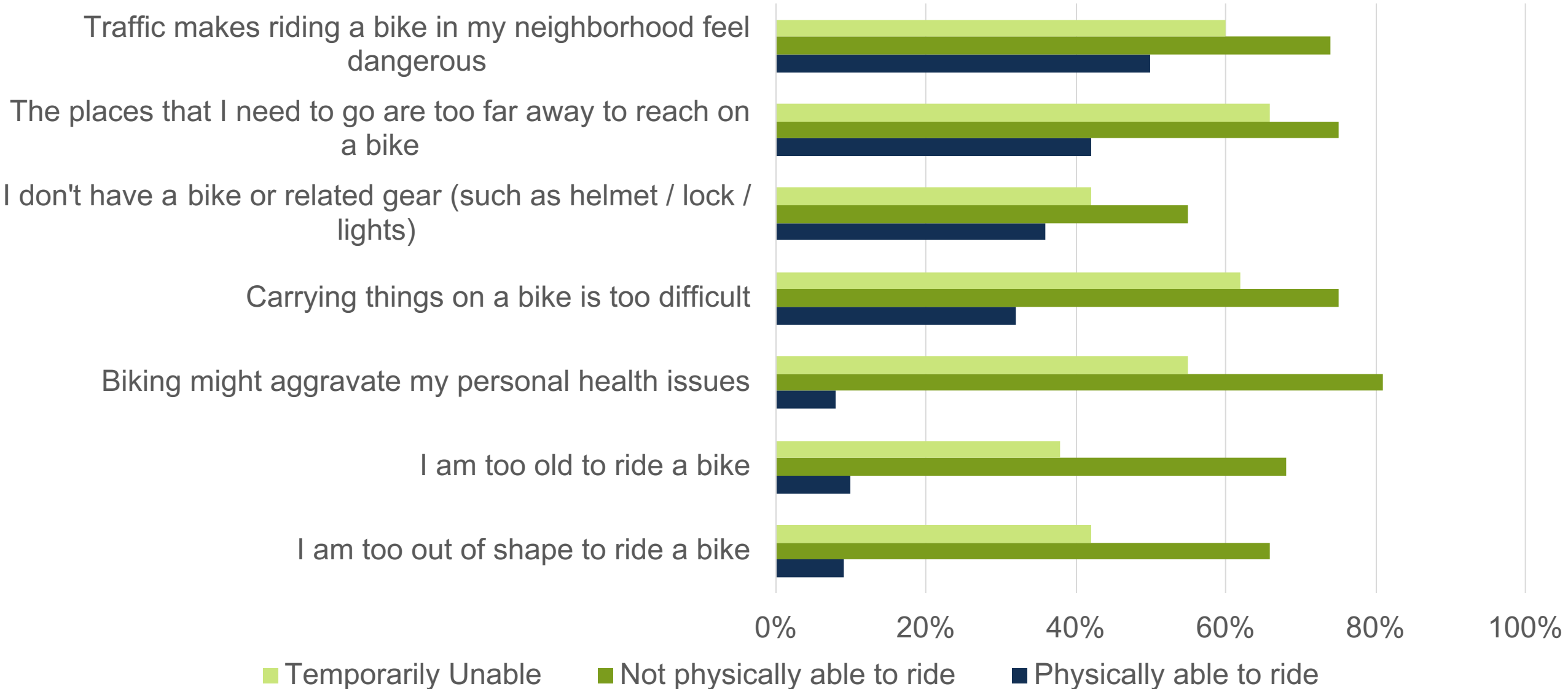
Market / Need

insights from a survey in low-income communities of color



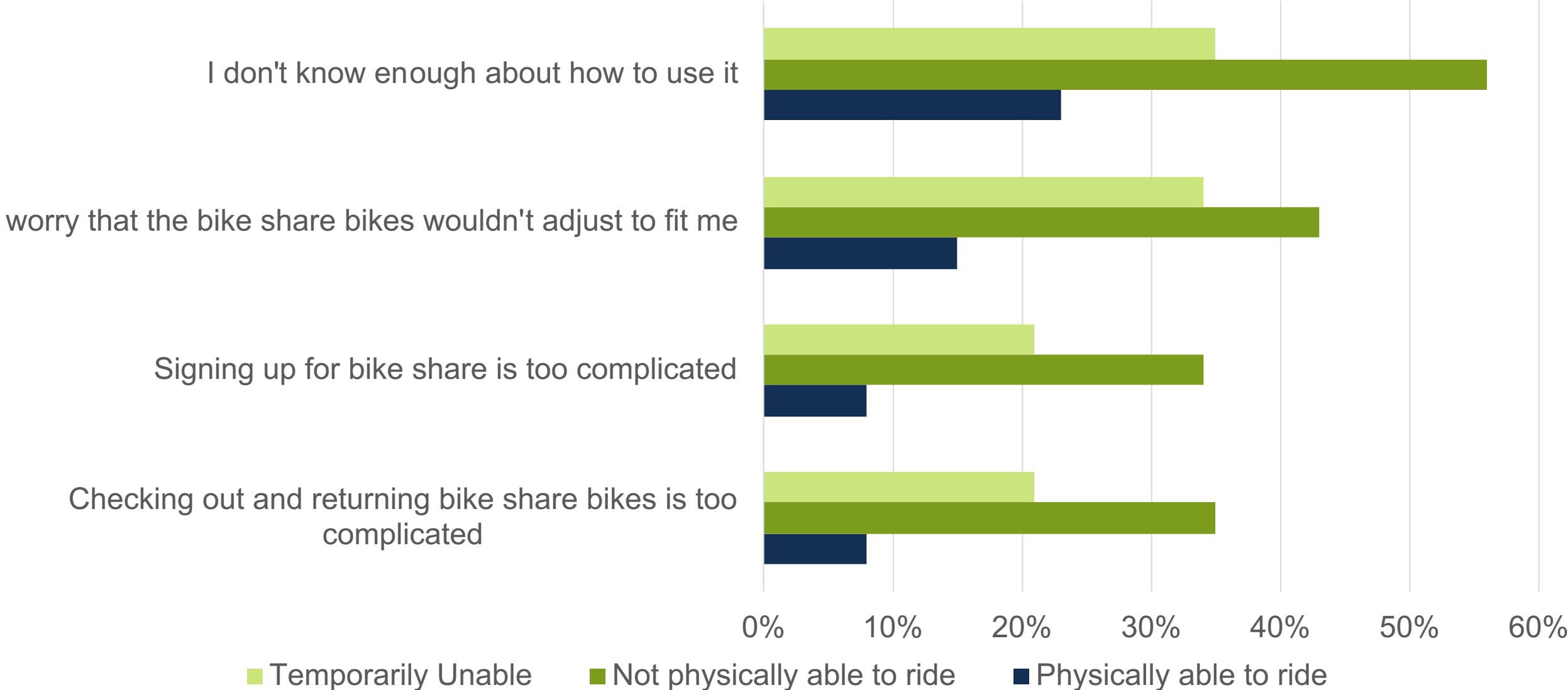
Barriers to bicycling

Bicycling Barriers, Percentage stating each is a “big barrier”



Barriers – specific to bike share

Barriers to bike share, Percentage stating each is a “big barrier”



ADAPTIVE CYCLING

Results from National Scan of Bike Share Equity Programs

Equality vs. Equity

Equality



Equity



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Adaptive Bicycles



Trikes/quadricycles



Tandems



Hand cycles



Electric bikes/scooters

Emerging Programs

- Of the **70 systems** that responded to the survey, **10** indicated that they had adaptive bikes in their systems: BIKETOWN, in Portland, OR, Bublr in Milwaukie, WI, Blue Bikes in New Orleans, LA, CoGo Bike Share in Columbus, OH, LimeBike Ithaca in Ithaca, NY, mBike in College Park, MD, MoGo in Detroit, MI, PeaceHealthRides in Eugene, OR, and Pedal Corvallis in Corvallis, OR.



Bike Library Model

- Pick-up location, rental store usually near recreational access
- Specific hours of operations, reservations
- Staff to assist sizing and questions
- Parking or storage for personal equipment
- Various types of equipment available
- Cost per hour/day, discount programs



Partnerships



MADE POSSIBLE BY...



Ralph C. Wilson Jr.
Legacy Funds
OF THE
Community Foundation
FOR SOUTHEAST MICHIGAN



High value for individual users



Adaptive Biketown offers folks the ability to choose within their abilities a recreational vehicle of sorts to experience our beautiful city in a new way which is not only fun, but also good for the body, for the mind, and for the soul. - Deidre Hall

Integrated Model

- Integrated into existing bike share system, same pricing
- Limited model types
- Limited access for some, parking
- Various pricing models
- No storage



Challenges facing the programs and operators

- Who to serve and how?
- Integration
- Cost
- Logistics and density
- Personalized assistance/fitting
- Maintenance
- Types of bikes



Further work is needed

- Develop a better understanding of the needs and experiences of people with disabilities with regard to cycling/bike share.
- Explore how to design and scale the bike share systems to be more inclusive to all users.
- Develop new technologies and vehicles that can expand current bike share systems
- Understand how to structure, fund, and manage adaptive bike share programs to maximize their ongoing viability.

Contact Information

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National Scan of Bike Share Equity Programs

<https://trec.pdx.edu/research/project/1278>

