



BIG AMBITIONS, baby steps: **Policy vs people in the sustainable transport transition**

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WHERE ARE WE NOW?



33% of GHG emissions

2nd highest gasoline prices, 8th highest diesel prices (Aug 2022)

No measures to restrict car use or purchase



135,742 registered vehicles (2020)

472 cars per 1,000 people

Fuel tax replaced vehicle registration fee (2018)



Dual bus system – 69 Transport Board (gov't), 782 public service vehicles (private) (2019)

Increase in flat bus fare by 75% to \$3.50 (2019)



Over 600 EVs, including 49 buses
Approx. 150 hybrids
2-year tax waiver (2022)

TRANSPORT CULTURE

Material culture

- Automobile-dominated infrastructure e.g. urban sprawl, easily accessible fossil fuels
- High private vehicle ownership

Practices

- Private automobile-centric travel
- Home purchasing choices reinforcing car-reliance
- Low use of active travel and shared modes such as public transport

Norms

- Perceptions of freedom and autonomy
- Car as a status symbol
- Perceptions of public transport

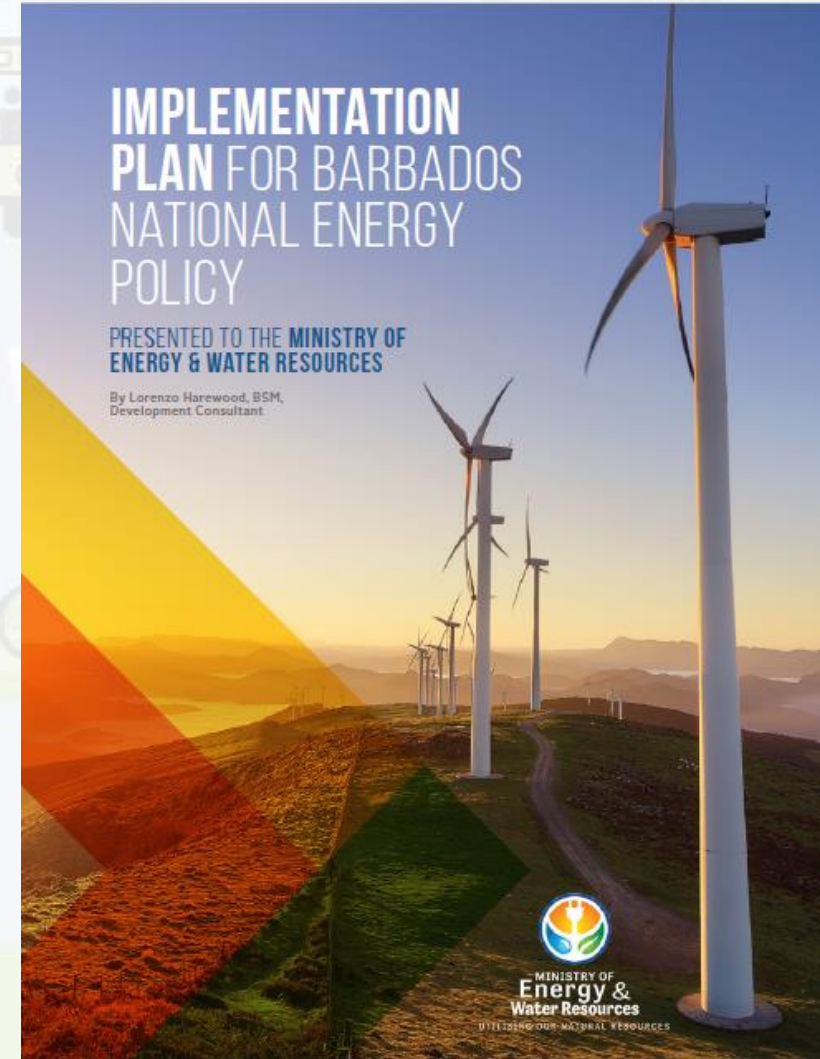
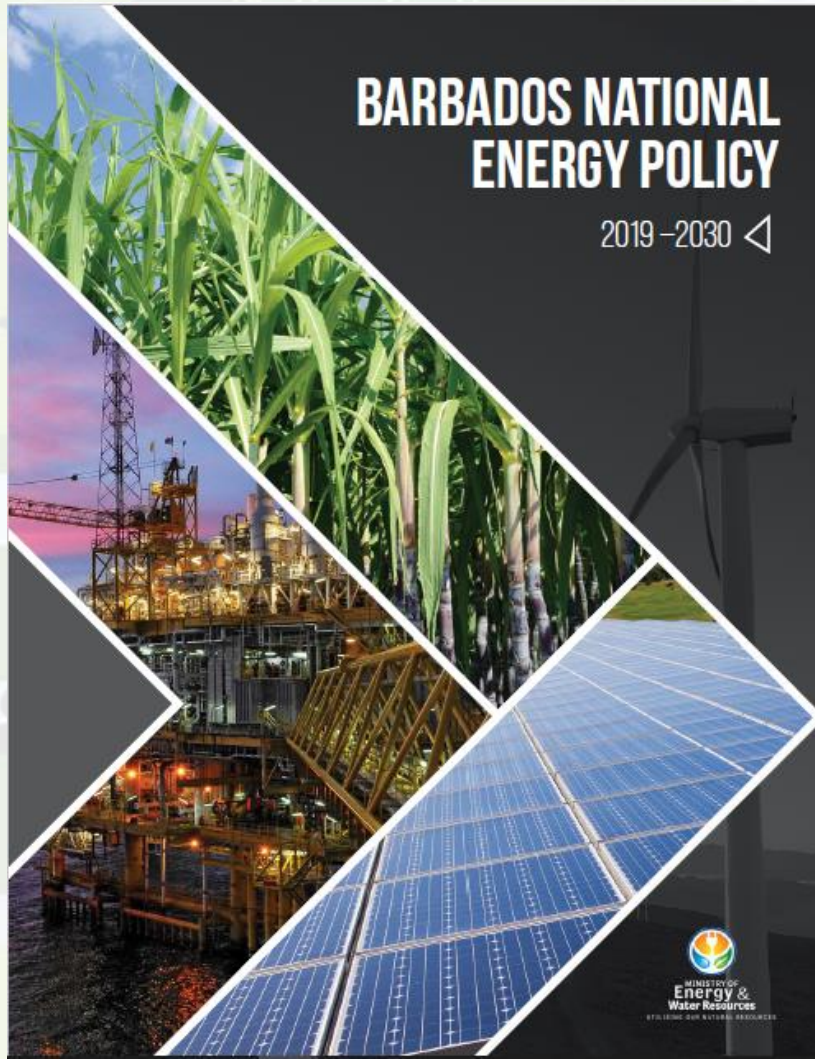
SUSTAINABLE TRANSPORT SYSTEM



WHAT IS OUR NATIONAL POSITION?

- An “efficient, reliable, affordable and resilient” transport system with **100% EVs or other alternative fuel vehicles** in the passenger fleet by 2030 (NDC 2021)
- Increasing the **amount of RE sources in the energy mix** to the extent that it can be technically socio-economically accommodated (BNEP 2019)
- Advance **mobility, connectivity and accessibility**. Achieved through **multimodal, active, public** and water transportation and parking management. Emphasises **alternatives to private vehicles and reducing travel demand** (PDP 2017)

HOW ARE WE GETTING THERE?



HOW ARE WE GETTING THERE?

BNEP intends to address:

- Energy **consumption and efficiency** in transportation
- Conversion from fossil fuel use to **electricity**
- Transportation management
 - **Fuel switching** within the transportation sector
 - **Clean energy use and emissions control** in transportation



DISRUPTION

Policies designed to drastically reduce emissions through a fundamental system shift to more sustainable and carbon neutral mobility

WHAT DO WE WANT?

Transport sector actors:

- Efficient and reliable
- Reduced GHGs and less pollution
- Clean and sustainable alternative fuels
- Affordable
- Revised, fair and enforced tax regime

Travelling public:

- Efficient and reliable
- Clean and sustainable alternative fuels
- Active mobility
- Affordable
- Reduced GHGs and less pollution

National transport survey

PRELIMINARY DATA



WHAT DO WE DO?

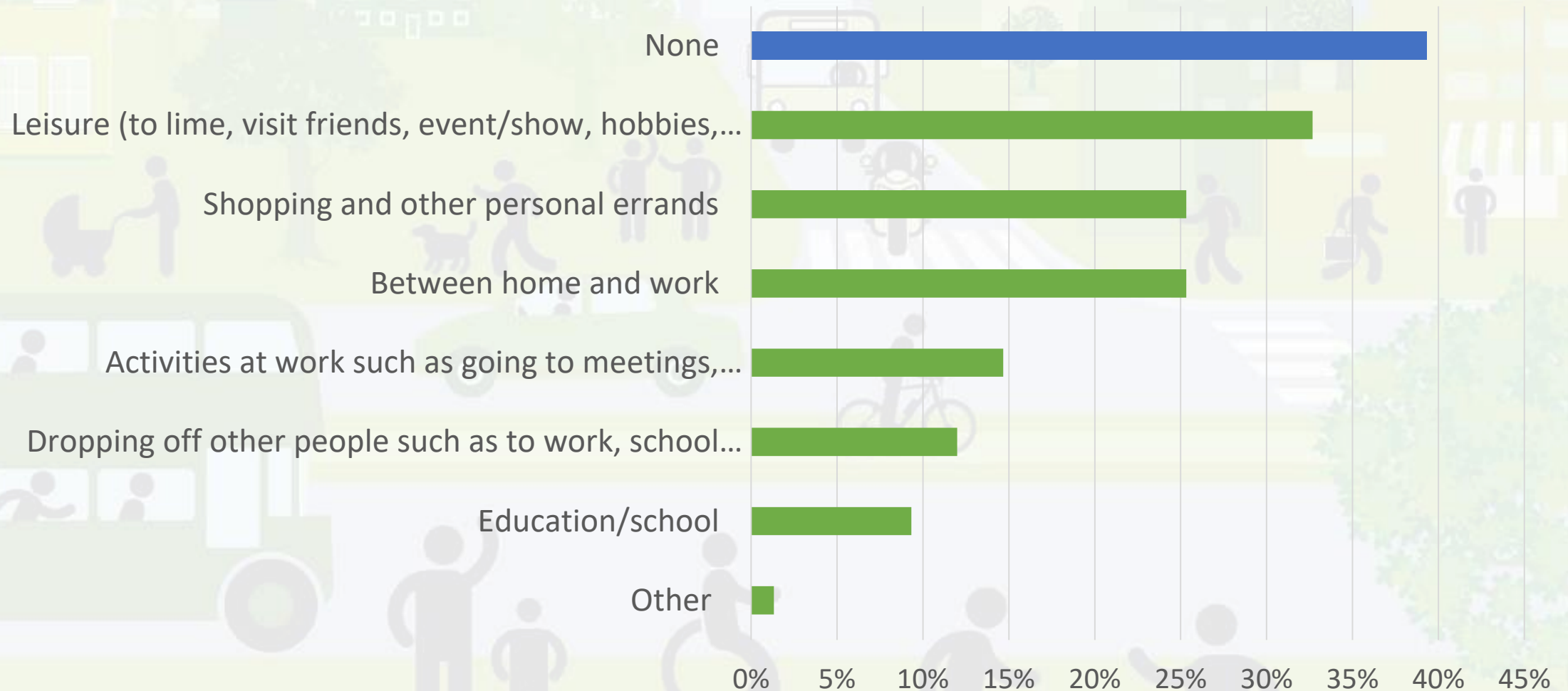
PRE-COVID

- 30-78% drove their cars for various trips
- 11% as passengers for commute and during work
- No motorcycles, bicycles
- Average 8% taking bus

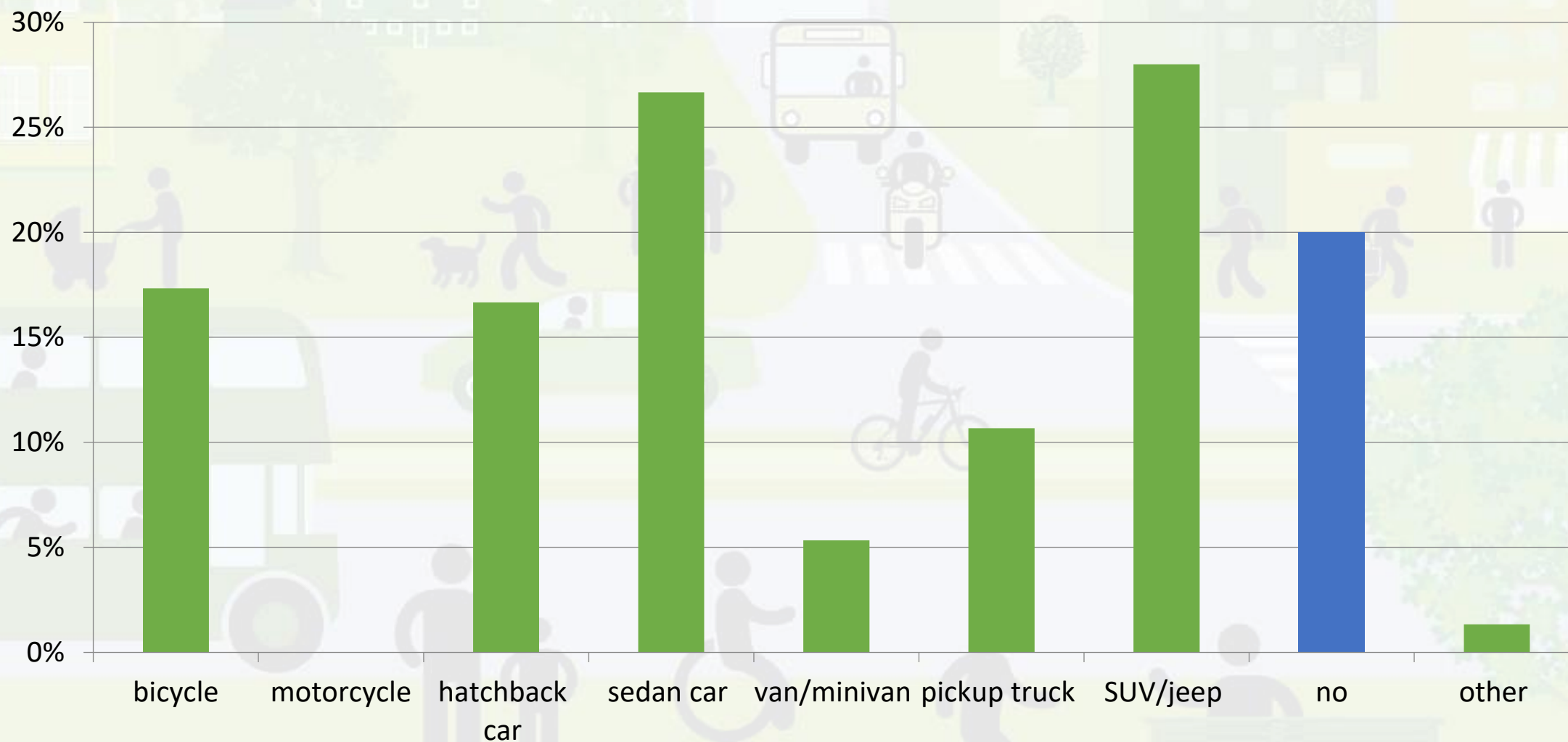
POST-COVID

- 17-75% now driving their cars
- Decreases in car passengers commuting
- Increases in passengers for leisure and “other”
- More cycling and walking to work and errands
- Similar levels taking bus, but $\frac{2}{3}$ to education/school
- 69% have new remote work policies

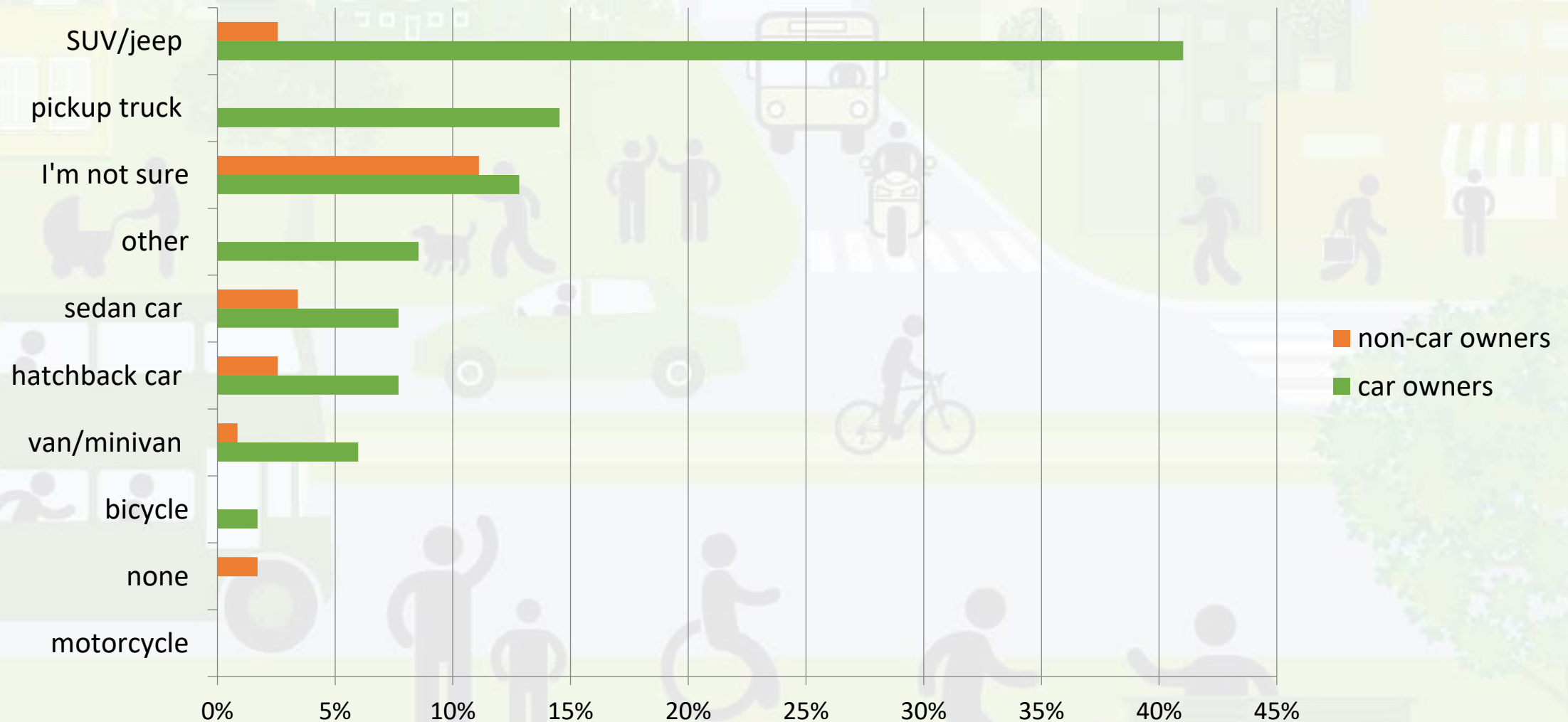
Which of your trips could you reasonably switch to a “greener” mode of transportation?



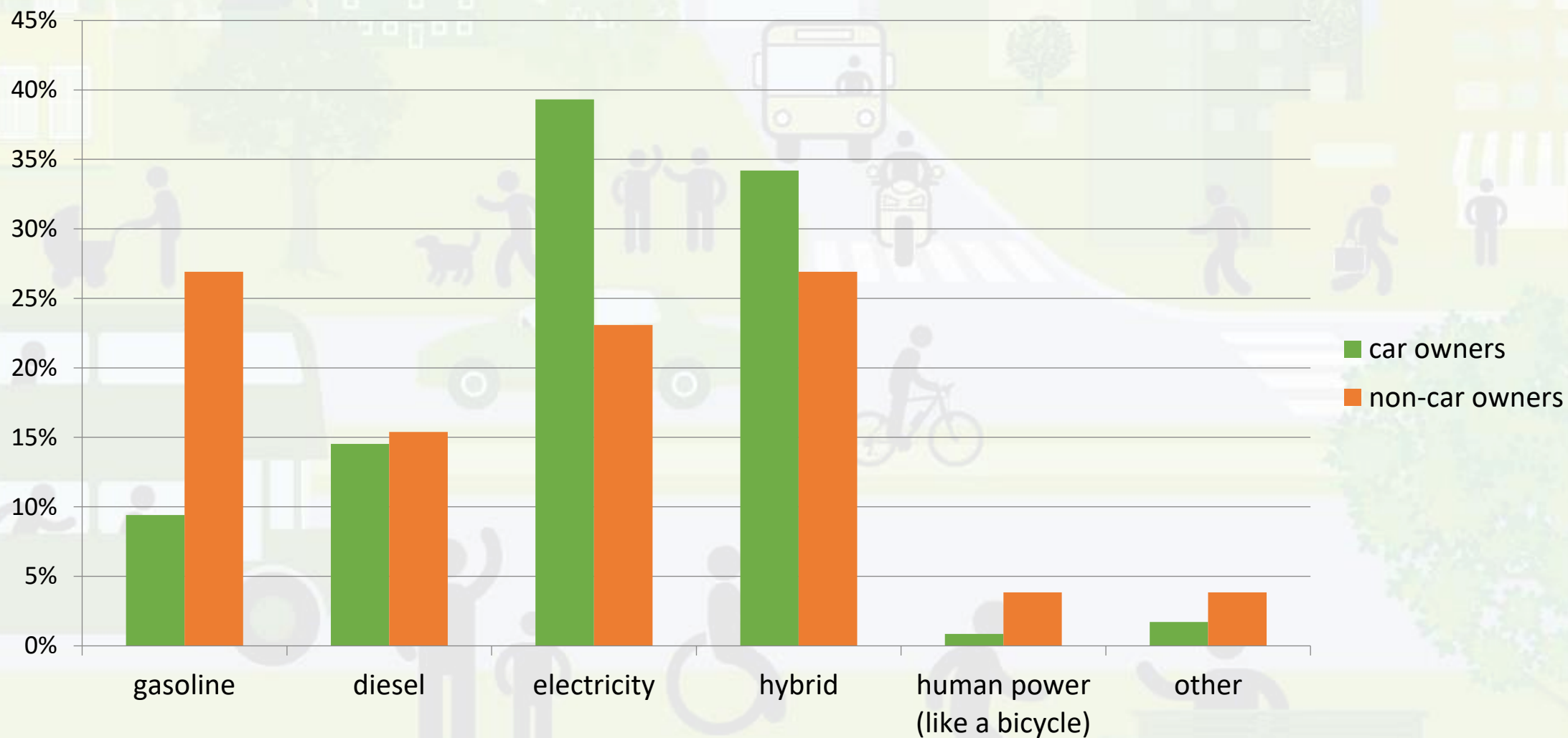
Do you own a vehicle?



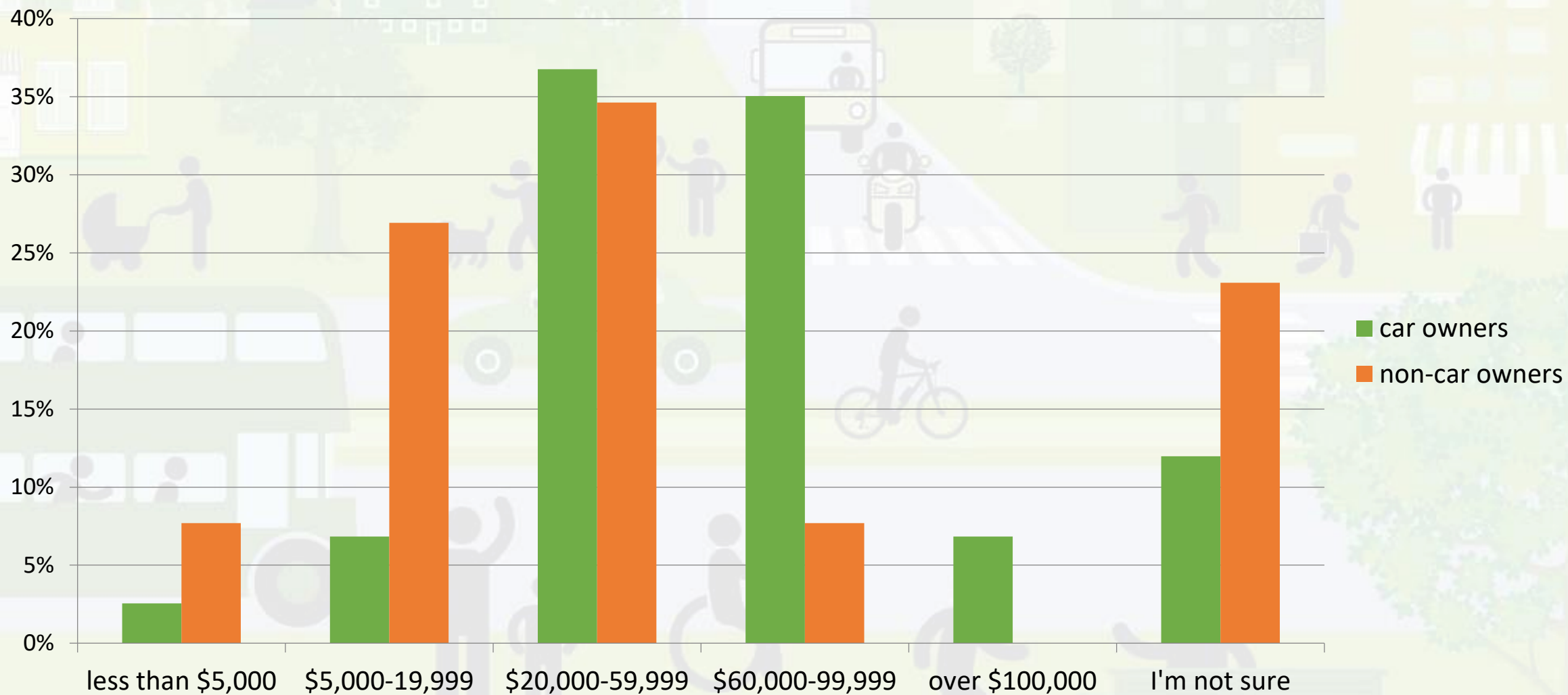
What would you purchase in the next year?



What type of fuel would it be?



What is your budget?



Top 5 factors to buy an EV

Helping to reduce climate change/global warming
No fuel costs
Low and infrequent maintenance
More charging stations across the country
No air pollution
Lower EV lifetime costs of about 20% (lower costs to fill up,...

10% subsidy or rebate (cash back) to buy EVs

Wider range of EV models available

If your home had renewable energy

Quiet motor

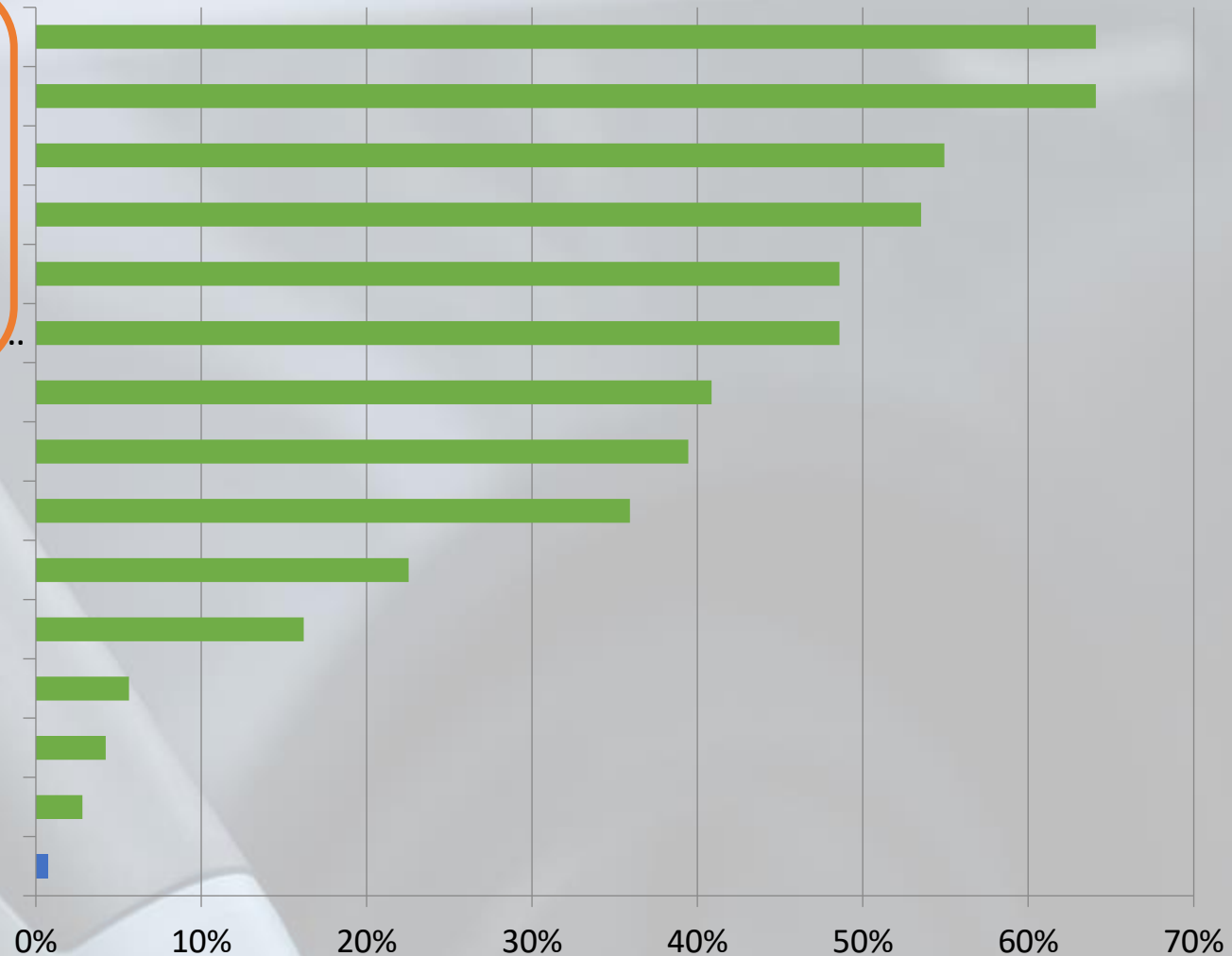
Both a 10% fee on regular vehicles and rebate on EVs

10% added fee on buying regular vehicles

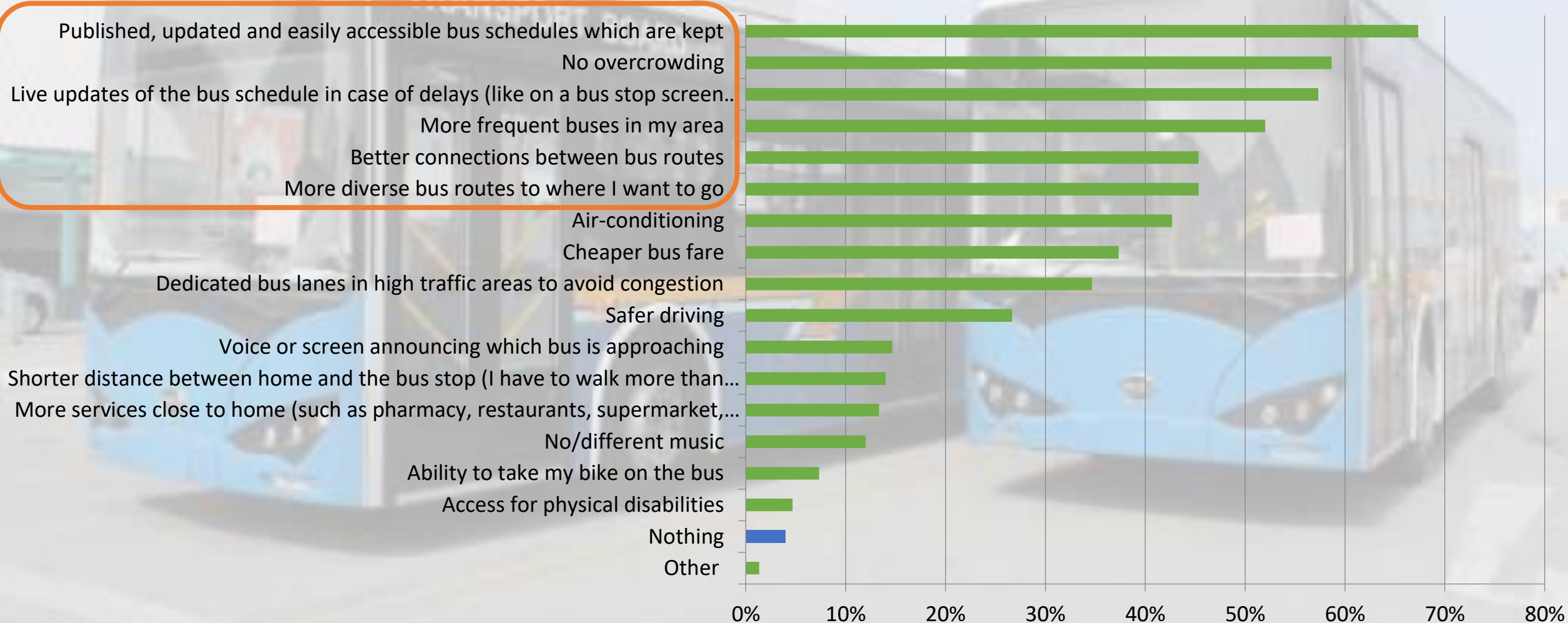
Other

More of your friends owning an EV and learning from their experience

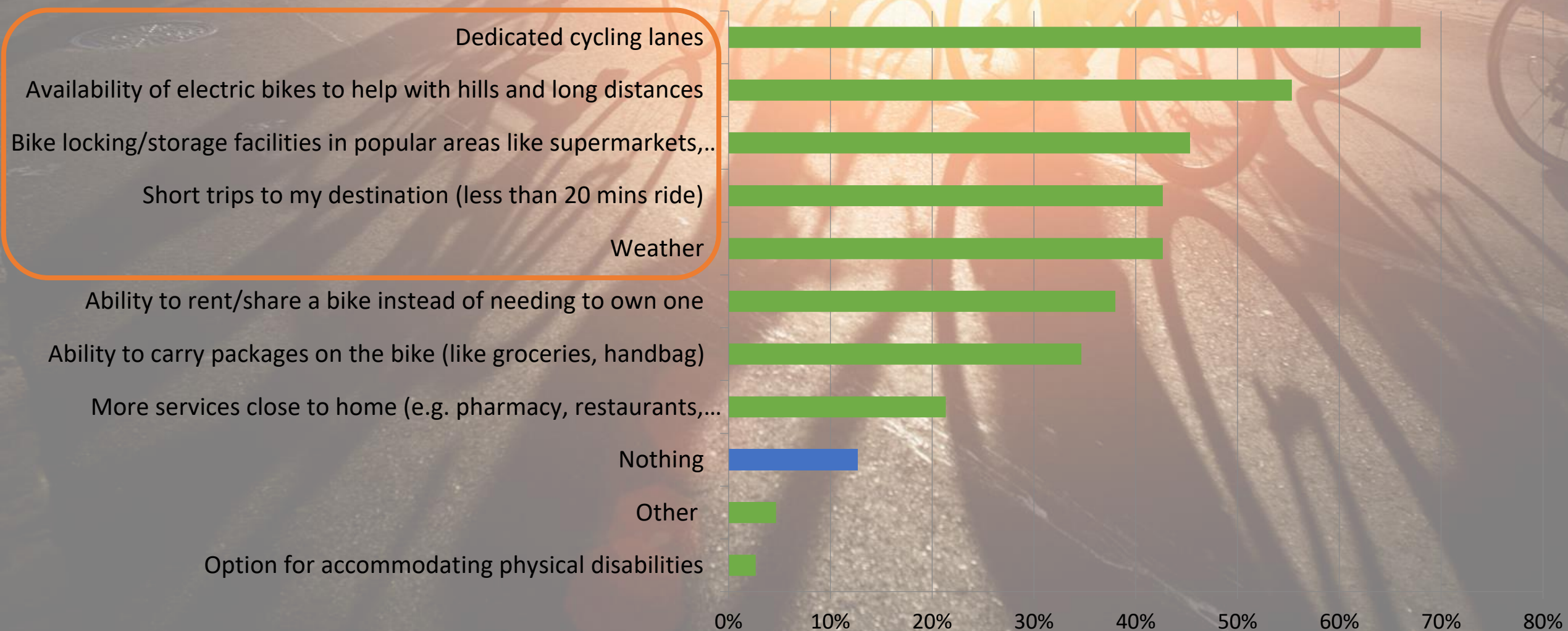
Nothing



Top 5 factors to switch to bus



Top 5 factors to switch to cycling

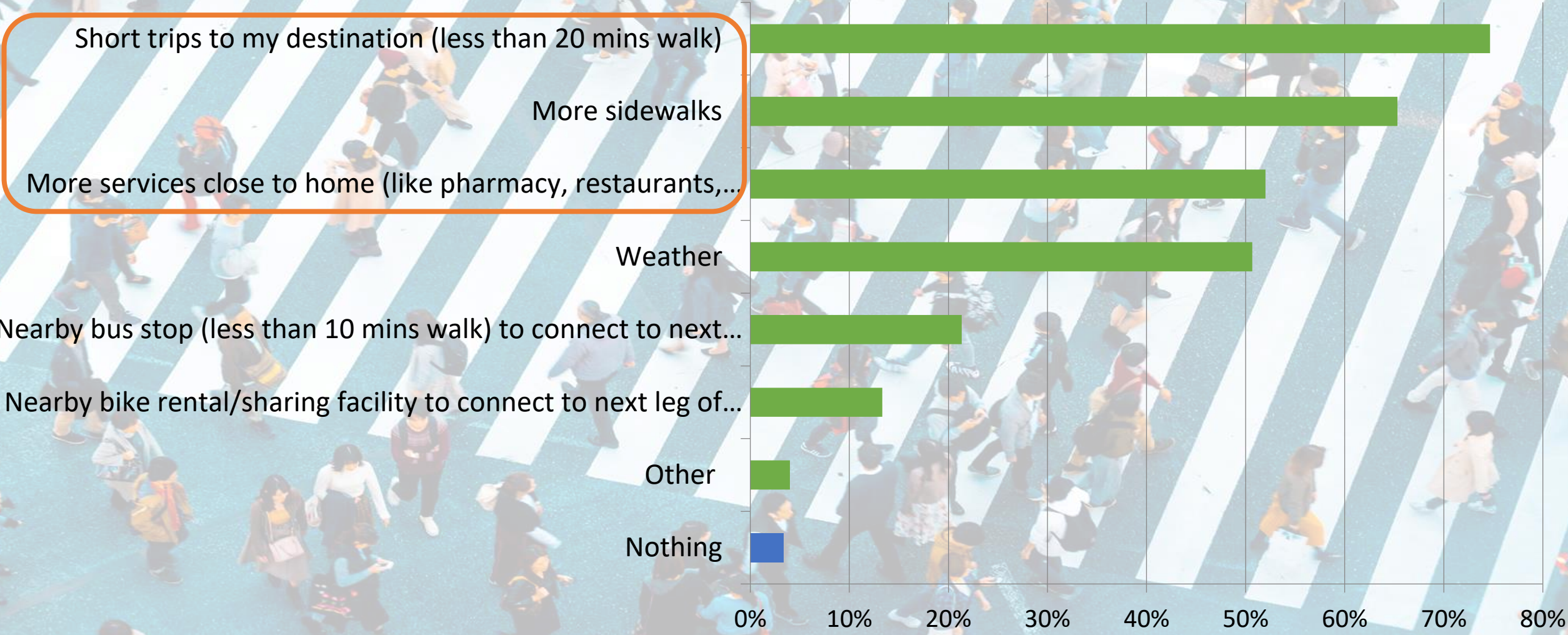


Top 3 factors to switch to walking

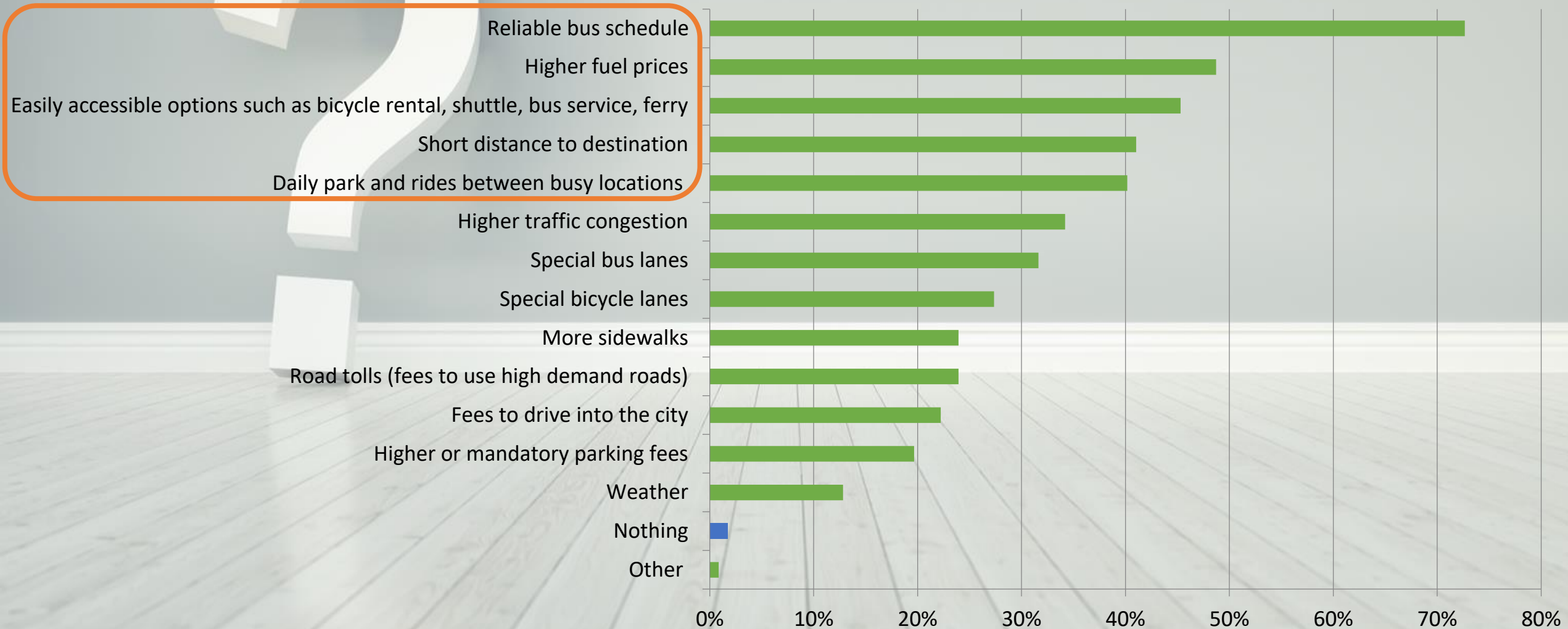
Short trips to my destination (less than 20 mins walk)

More sidewalks

More services close to home (like pharmacy, restaurants,...)



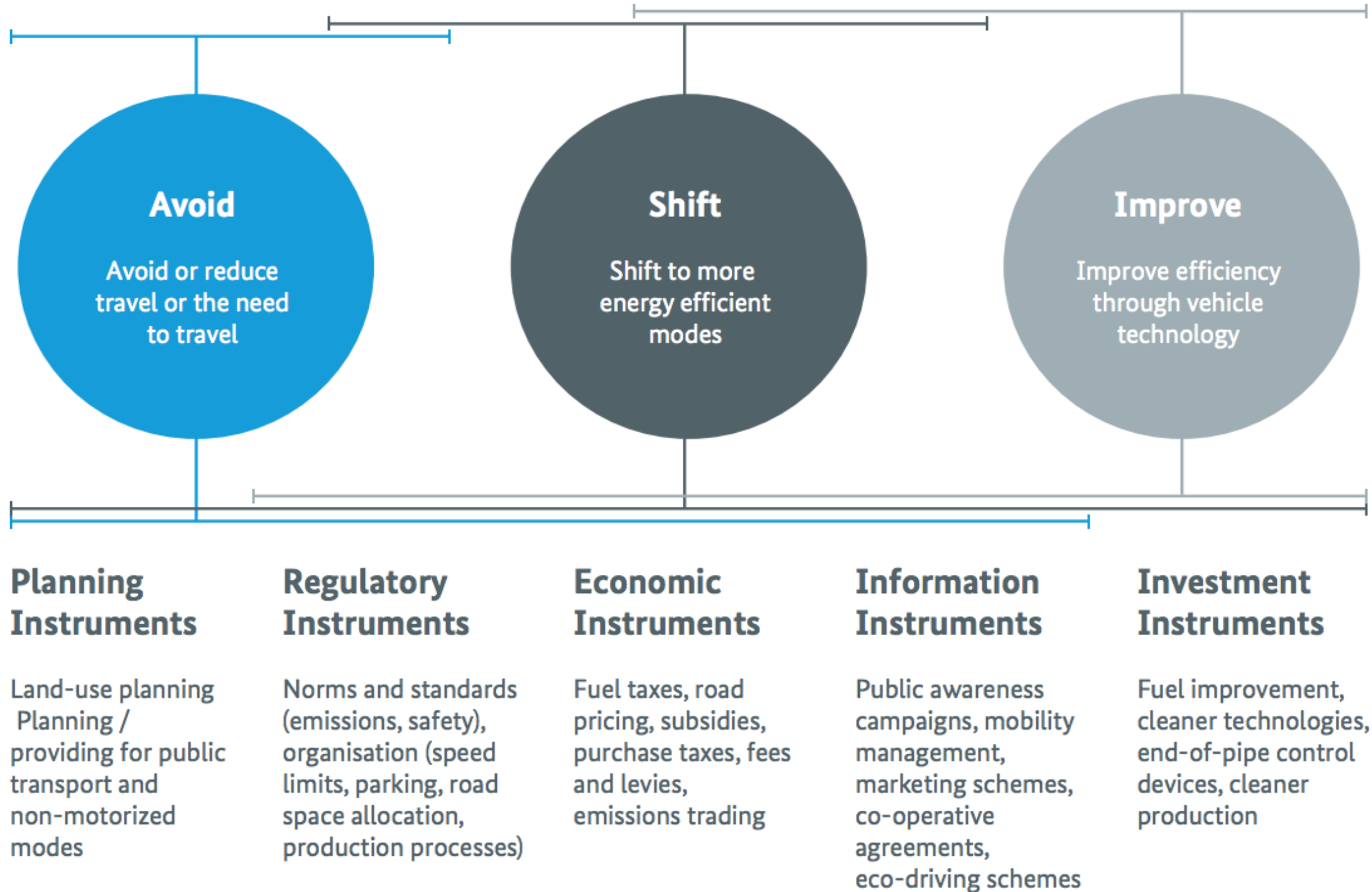
Top 5 factors to switch to any other mode



DO WE HAVE WHAT WE NEED?

POLICY		PEOPLE
AVOID		More sidewalks Closer proximity of amenities and services
SHIFT	Use of management technology in public transit	Dedicated cycling lanes More frequent and reliable buses Easily accessible and better connected modal choices Park and ride
IMPROVE	More RE and clean energy into public transport Tax incentives to dealerships that train their mechanics to maintain and repair EVs More stringent regulations on vehicles' exhausts and emissions More charging stations for EVs; and charging integrated into petrol stations Transportation info system Biofuel standards Standards for charging and other RE fuelling	More EV charging stations Lower EV overall costs

ASI FRAMEWORK



DISRUPTION

- Widespread social change in perceptions, choices, habits
 - Deep governance changes
 - Complementary measures
 - Spatial planning changes
- Infrastructure for active and public transport
- Multimodal connectivity to reduce car dependence
 - Urban redesign for improved walkability
- Leverage opportunity of an external catalyst to change habits

DISRUPTION

- Incremental adjustments in behaviour
 - Gradual efficiency improvements
- Focus on discrete parts of the system
- Perpetuate unsustainable practices
 - Safe and comfortable

TRANSITION IMPLICATIONS

- 50% of sector actors surveyed do not think it can be achieved
- Fear of political/social rejection is the biggest barrier to the transition
- Contingent on policy complementarity across multiple sectors and across the ASI framework
- Acceptance driven by how diverse needs are considered
- BNEP does not consider spatial planning/urban design to facilitate new mobility behaviours, disrupt car dependence and lower overall transport demand
- Societal factors and consumer behaviour more significant in determining policy effectiveness than regulatory and fiscal measures

Are our actions matching our ambitions?

<https://www.surveymonkey.com/r/barbadostransportsurvey>