



Moving beyond the A to B

MATT ENSOR

BUSINESS DIRECTOR - ADVISORY

BECA

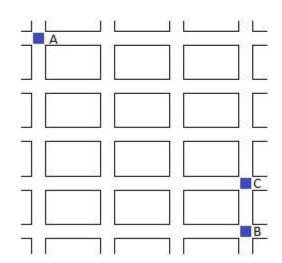


@MATTHEWENSOR

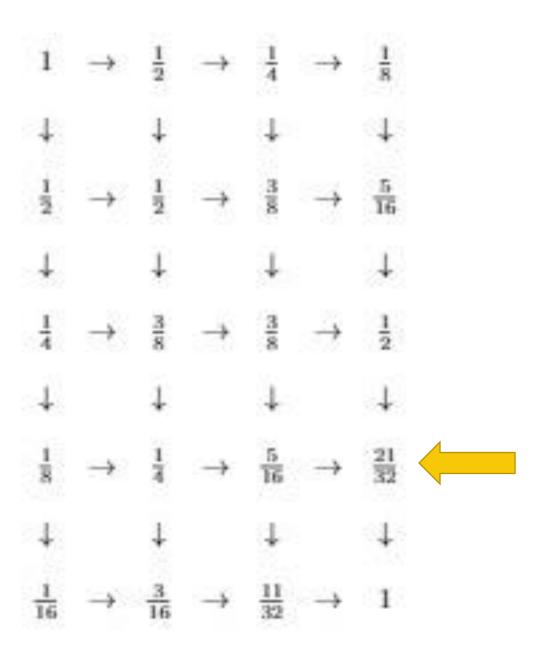
Logic will get you from A to B.
Imagination will take you everywhere

- Albert Einstein

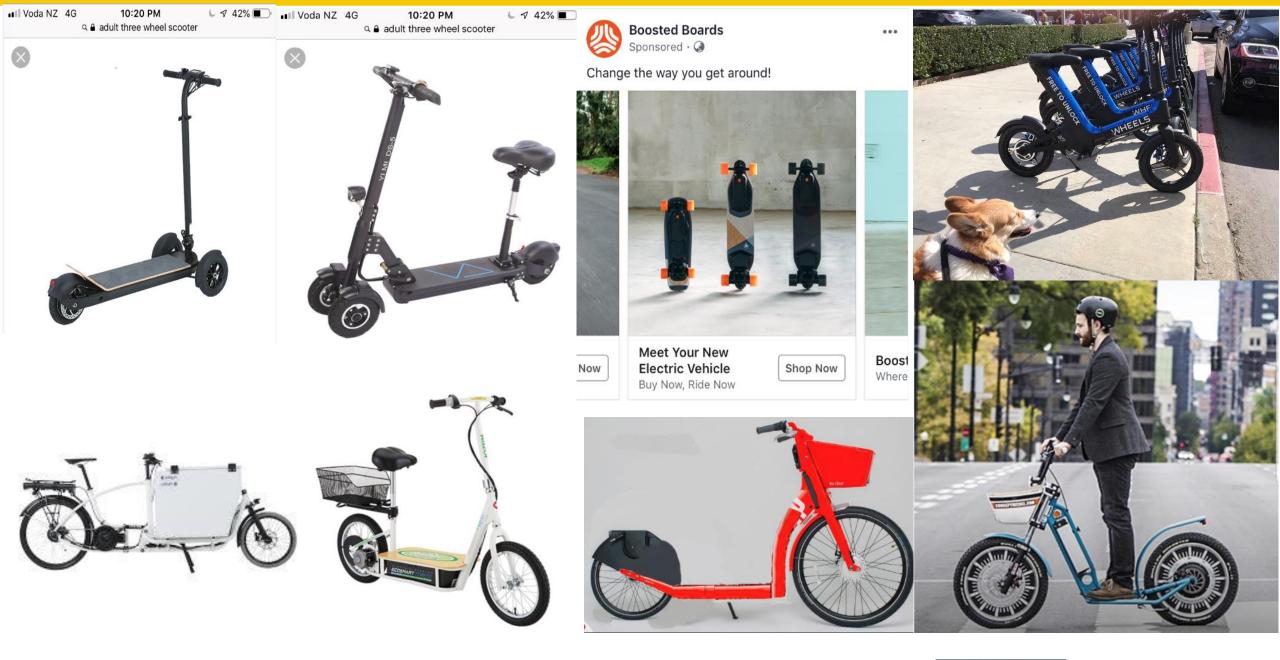
The figure below is a map of part of a city: the small rectangles are blocks and the spaces in between are streets. Each morning a student walks from intersection A to intersection B, always walking along the streets shown, always going east or south. For variety, at each intersection where he has a choice, he chooses with probability $\frac{1}{2}$ (independent of all other choices) whether to go east or south.



Find the probability that, on any given morning, he walks through intersection C.















CLEVR FORZA

Automotive Grade Intelligent Electric Scooter

Description

The CLEVR FORZA is the first electric scooter developed to an automotive standard. Its 3-wheel stability offers a more approachable ride for most ages and skill levels. Connected IoT features include network controlled real-time geofencing, variable speed control and precise parking management.

Uses

- Shared Mobility
- · Public Transit Integration
- Tourism
- Hospitality
- Educational/Corporate Campus
- Event Management
- Facility Management
- Law Enforcement
- Commuting

Certifications & Ratings

Vehicle Wet Rating: IP65
Battery Wet Rating: IP65
Battery Certification: CE, UL
Vehicle Certification: UL,

RoHs/Reach, LVD

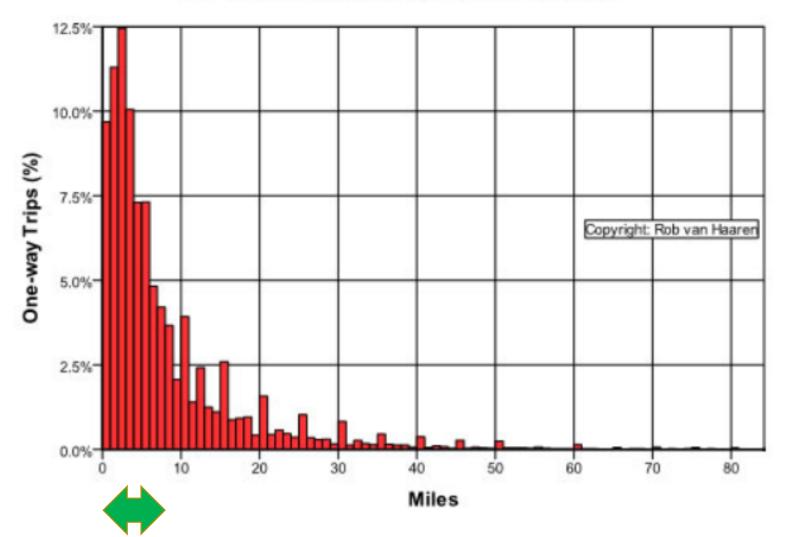
Features

- 3-Wheel Stability
- Built-In Color Display
- Smartphone Mount
- RFID Payment Compatible
- Bluetooth Enabled
- Adjustable Top Speed (Up To 25 MPH/40 KPH)
- Over 30 Mile / 50 Km Range
- · Swappable & Trackable Battery
- CLEVRNav Precise GPS Tracking Within 3 Ft
- LED Accent Safety Accent Lighting on Handlebar Assembly & Scooter Frame
- Built-In 2000 Lumen Daytime Running Headlight
- Rear Flashing Brake Lights
- Integrated Basket with Cup Holders for Light Cargo
- Speaker & Siren
- Geo-Fence settings Speed, Location & Parking
- Remote Wheel Locking Activation
- Integrated Bell
- 2-Point Parking Stand
- Extra Wide Deck for Side-by-Side Stance
- No Exposed Cables or Wiring





Car Trip Distance Distribution (n = 748,918)













First lime scooter experience: smacked my head on a branch and got yelled at by helly pedestrians for being on the sidewalk still a 9/10 tho

6:20 PM · 17/02/19 from Indianapolis, IN · Twitter for iPhone

6 Likes







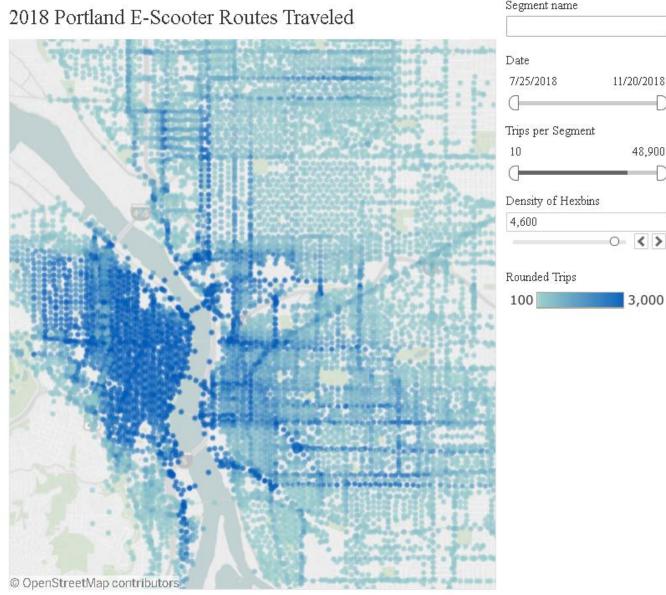








E-Scooter Routes Traveled Interactive Map



including NE Going Street, SE 122nd Avenue, NW Johnson, SW Naito Parkway, and the Willamette Greenway Trail - are also a part of Portland's bikeway network. It is clear e-scooters were utilized in East Portland, where the City required companies to deploy at least 100 scooters per day.

Description: Informed by

company-provided route data, this

map shows routes travelled by e-

scooter riders most often. Darker

blue dots signify more trips taken

on that street segment. Many of

the heaviest utilized routes -

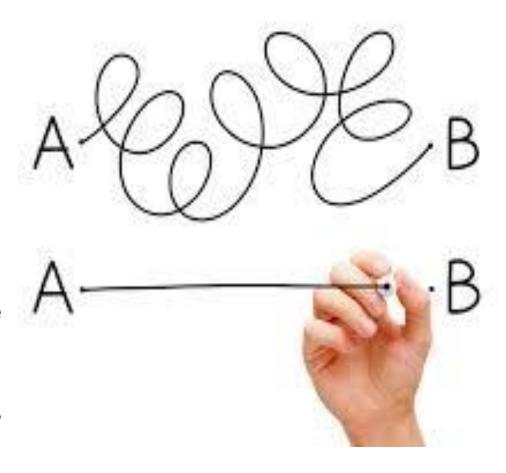
© OpenStreetMap contributors https://www.portlandoregon.gov/transportation/78431





Portland Trial

- E-scooter users preferred riding on low-speed streets and in bike lanes. Many of the highest utilized streets were part of Portland's bikeway network.
- Staff observations also found lower rates of sidewalk riding on low-speed streets or those with dedicated space for non-motorized users. Users ranked bike lanes as their preferred road type, and sidewalks last.







Moving Beyond the A to B

The tradition of transport planning has been to look at land use, the origins and destinations for trips, and provide the necessary routes, capacity and mode options for people to get from "A' to "B".

However as transport technology and the expectations of communities and transport users change, a focus on the transport journey itself will start to influence how we design the transport network.





Street Appeal

The value of street improvements Summary Report

Report prepared by UCL as a commission from Transport for London









10 Healthy Street Indicators™



Everyone feels welcome

People to choose to walk and cycle

People feel relaxed

Easy to cross

Clean air

Not too noisy

Places to stop and rest

People feel safe

Things to see and do

Shade and shelter





Placemaking for micro mobility journeys



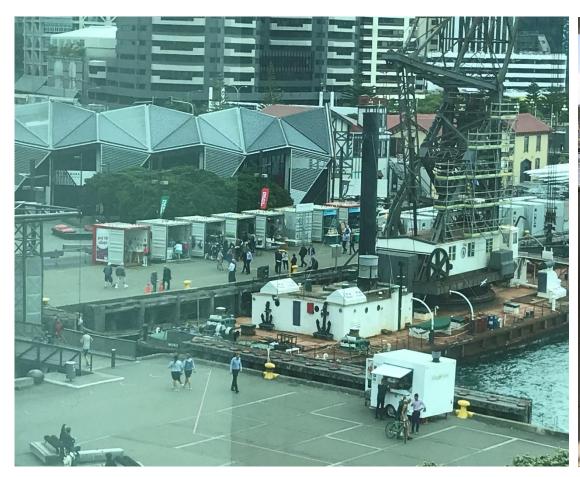
- When a space like this was improved, the most significant change of all was the 216% hike in 'Leisure based static activities' (e.g. stopping at a café).
- This is an attractive micro mobility route, people will go out of their way to travel through here.

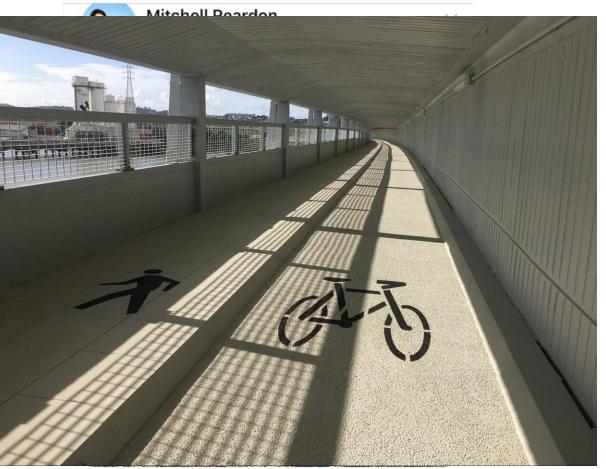




Placemaking for micro mobility journeys

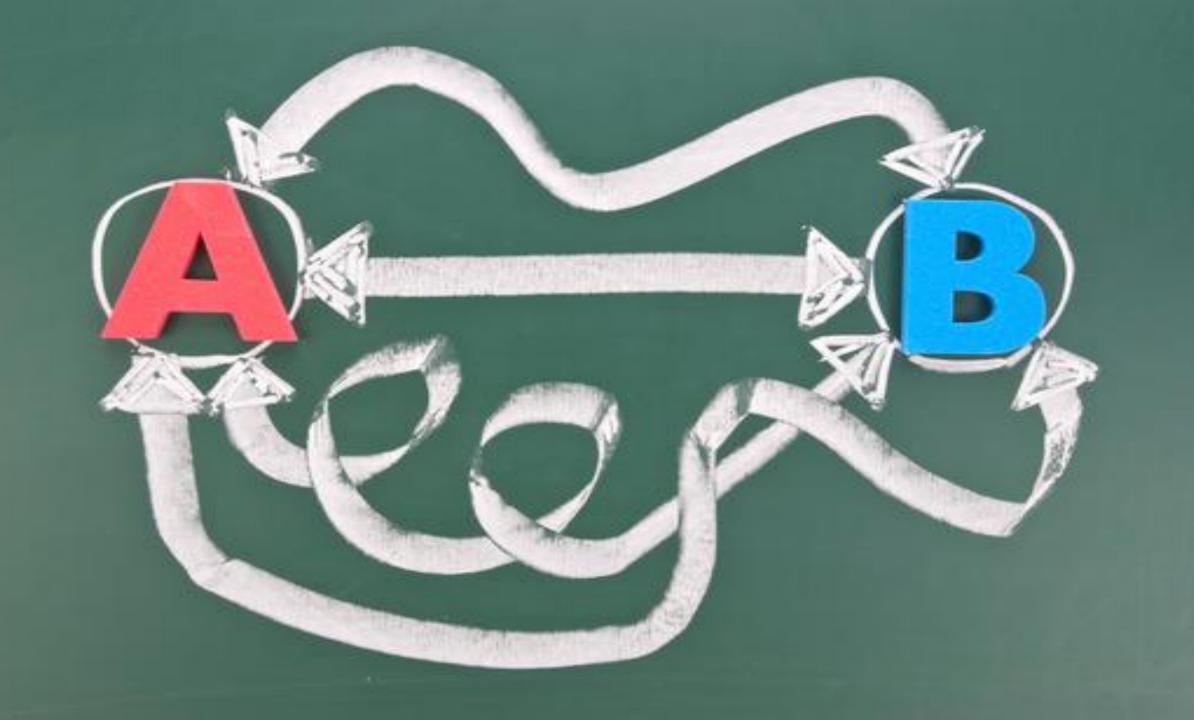
III Voda NZ 4G











Let's discuss during Q&A:



- Micro mobility will be a significant new transport mode, with millions of trips per month.
- People on micro mobility will choose safer, more "pleasant" routes
- These people will feel connected to their environment and more willing to stop for 'Static Leisure Activities' (e.g. cafés and pop-up retail)
- We need to understand what providing micro mobility infrastructure is: <u>it's more than creating</u> <u>routes that get people from A to B</u>.



