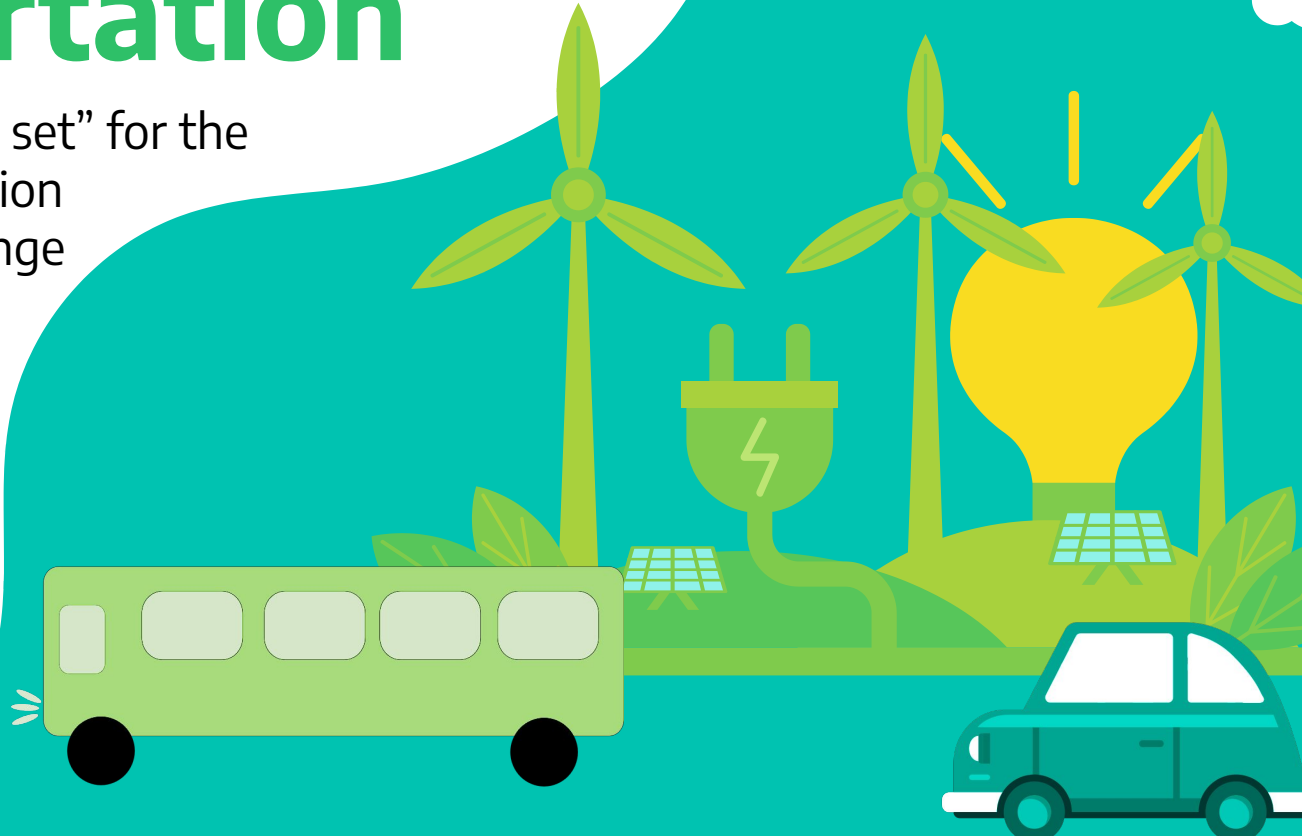


ALSET

Transportation

Ensuring Mississauga is “all set” for the future of public transportation and combating climate change



Meet Our Team



Aidan Rando

Environmental
Management and
Geography Graduate



Racquel Pâté

Environmental Science and
Political Science Graduate



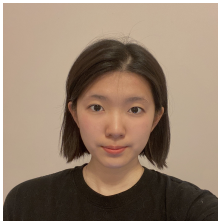
Michelle Kowalczyk

Honours Biology and
Environmental Sciences
Graduate



Bowen Ouyang

Environmental Management
and Geographical Information
Systems Graduate



Shiyi Liu

Environmental Science and
Geographical Information
System Graduate



Rongxi Liu

Environmental
Management and
Linguistic Student

The Road So Far

Average distance

0	0	0	4	4	K	m
---	---	---	---	---	---	---

Per person/day

Current Transportation

71%



11%



Work and Residence

49%

of Mississauga residents
both live and work in
Mississauga

The Issues

Emissions:

67% Of Mississauga GHG emissions are from transit industry operations

40% Natural gas fuel type consumption

20% Each for gasoline and electricity fuel type consumption

Ridership Inequality:



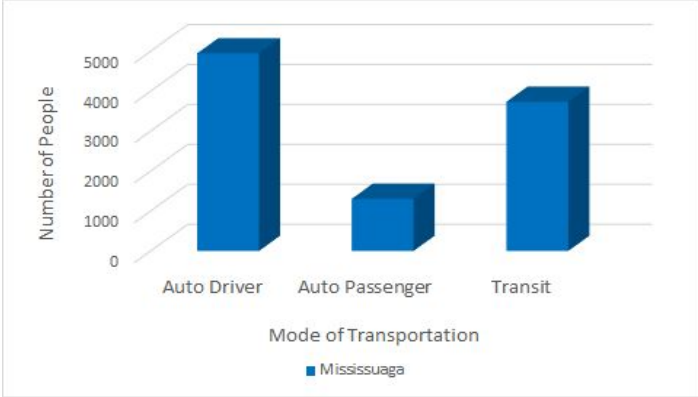
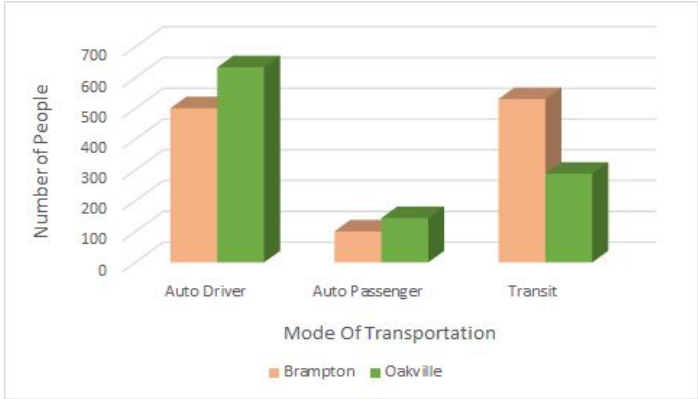
Inflation

Transit Unevenness



Student Commuter Example

Locations (km)	Auto Transit Time	Bus Transit Time	Transit Cost
UTM to Square One (7 km)	~13 min	~34 min	Free (with U-Pass)/ \$3.10
UTM Oakville (11.7 km)	~37 min	~56 min	\$3.16 (with U-Pass)/ \$6.26
UTM to Brampton (27.2 km)	~21 min	~ 1 hr and 24 min	\$ 3.10 (with U-Pass)/ \$9.30



(Data Management Group, 2014; City of Mississauga, 2021; Town of Oakville, 2021; City of Brampton, 2021)

Goals & Objectives

City Wide Sustainability



Reduce Emissions



Cleaner energy



Ridership Inequality



Connections



Methodology: Data Analysis

Referential Data



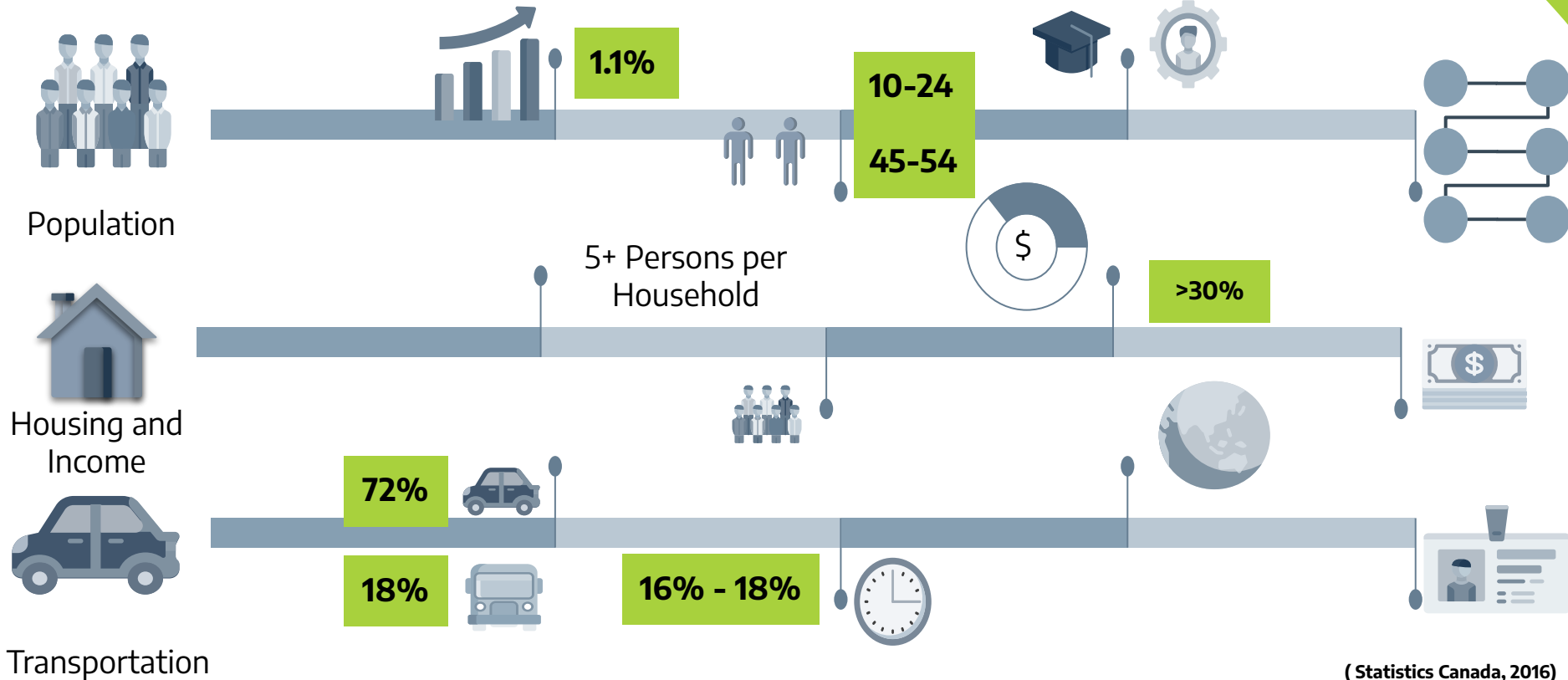
Population Data



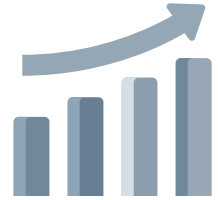
Financial Data



Mississauga 2016 Census Data



Translink - Vancouver Case Study



2019 - 2020



Transit Service

6.3% regularity



On Time Performance

8.8% more bus trips on time (15 min prior)



Customer Satisfaction

0.6% Average satisfaction rating



Operating cost per trip

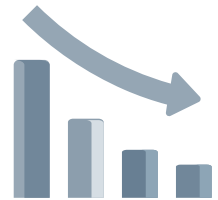
\$2.08 per trip



Environmental impacts

147 tonnes of CO2

10748 gigajoules in energy consumption



2018 - 2019



Considerations for MiWay

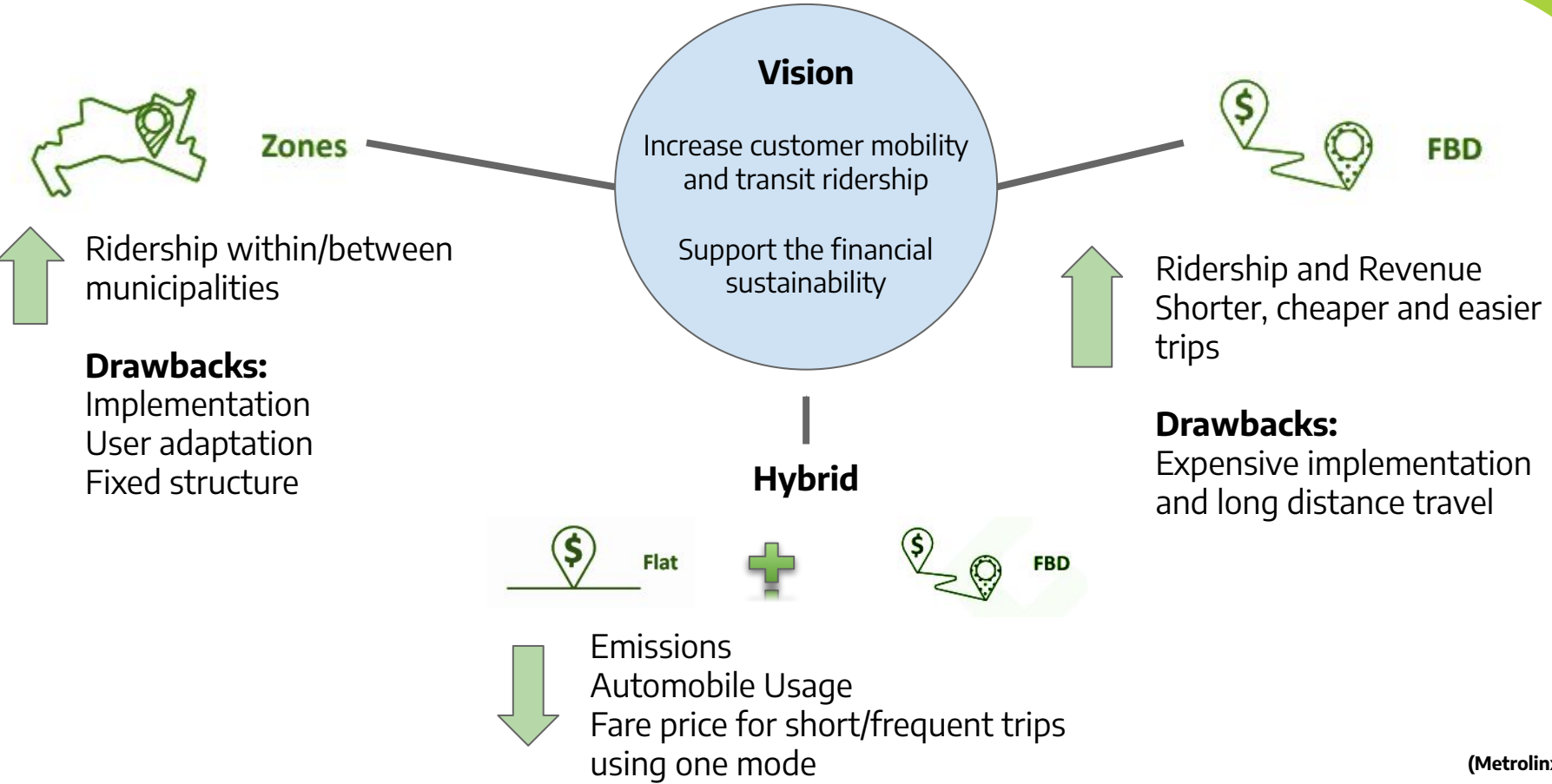
Zone based fares

Single base fare and Fare by Distance hybrid

More frequent service

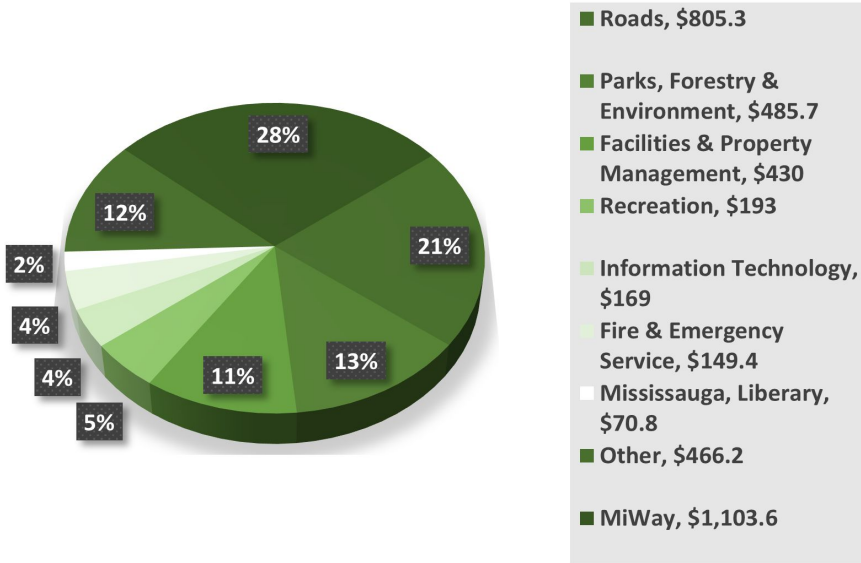
SkyTrain Infrastructure

Metrolinx GTHA Fare Integration Strategy



MiWay Budget

2021-2030 Capital Budget Forecast by Service Area \$3.9 Billion (Millions)



Servicing express routes



Servicing local and school routes



Exponential funding towards public transit



Future funding allocated to achieve SDGs



Mississauga's Current Progress Towards to the SDGs

Mitigation (reducing emissions) and adaptation (managing impacts)

Our Goals

Common Points

City's Goals

Implementing Comprehensive Bus Passes and Eliminating Transport Barriers

GHG Reduction Target 40% below 1990 Levels by 2030

Replacing the Bus Fleet with Low Emission/ Zero Emission Vehicles

Improving the Bus Coverage and Reduce the Inequality

Enhancing the Quality of Transportation System in Mississauga

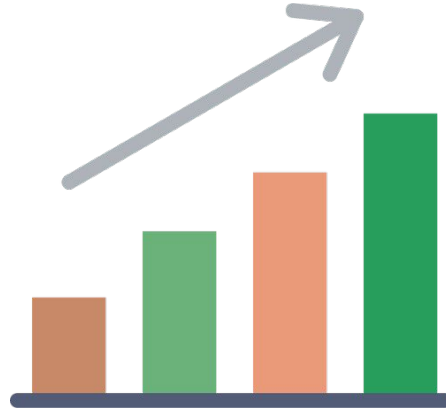
Developing Infrastructures for Electric Vehicles

Deliverables

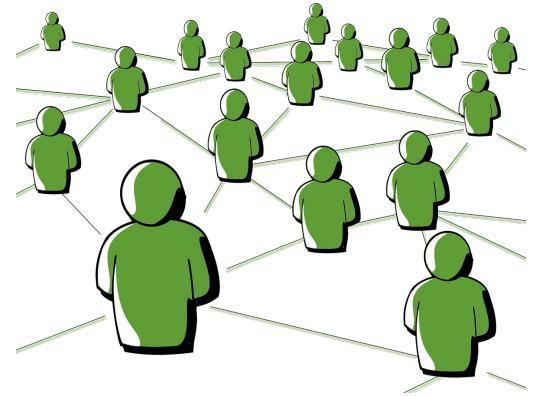
Reduce Costs



Improve Efficiency



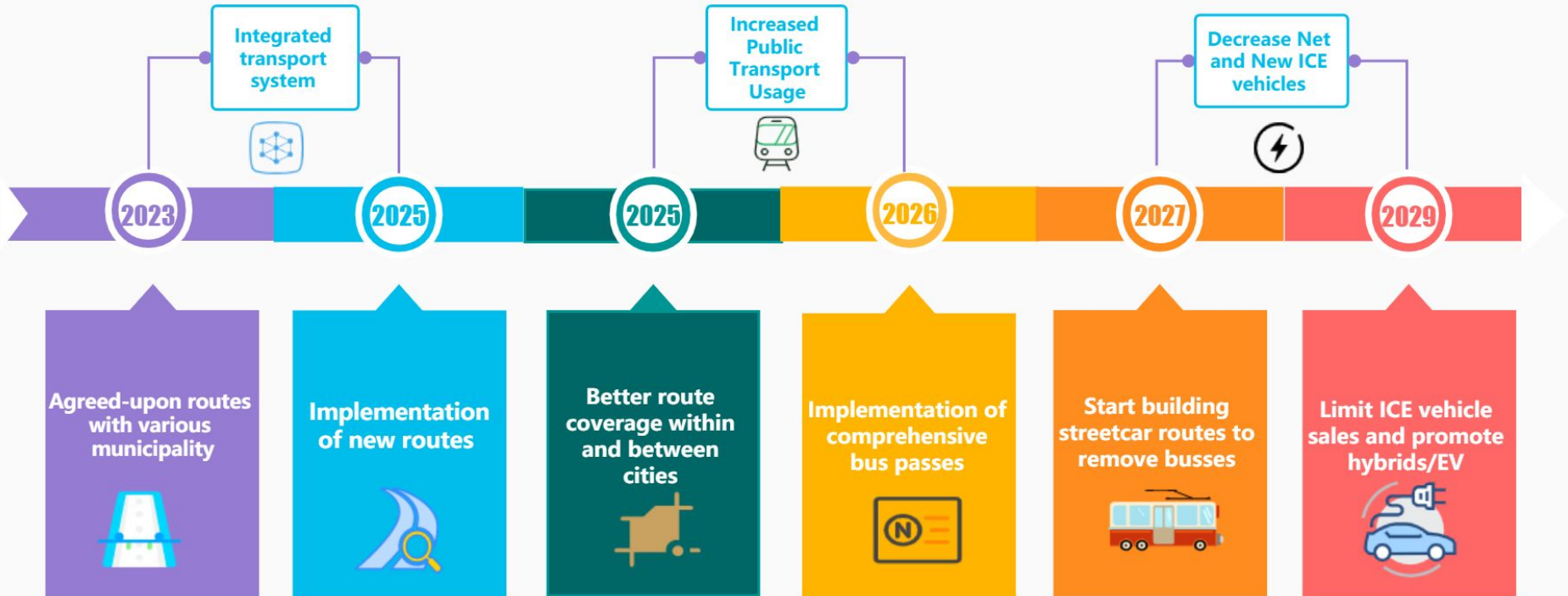
Extend Coverage



A hand is holding a white rectangular card in the lower right quadrant of the image. The card features the text 'NEXT STEPS' in a bold, sans-serif font. 'NEXT' is in a medium green color, and 'STEPS' is in black. The background is a vibrant green with a blurred, abstract pattern of dark green and black lines, suggesting a network or a complex structure. The overall composition is clean and modern.

**NEXT
STEPS**

Timeline



Thanks!

6.6

Special Thanks to our:

Professor Tingting Zhu
TA's: Hwang Lee, Marissa Irene Uli, & Mehria Waqar
Mentor: Alex Legrain

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, and infographics & images by **Freepik**

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 - Presentation editing
 - Video editing
- Bowen
 - Audio & Scripts for Slides 12,13,15
 - Data Collection & Design for Slides 11, 12, 15
 - Presentation editing
- Michelle
 - Slides 3/4/6 including audio, script, and design
 - Slide 5 data collection and design input
 - Slide 13 design input
 - Presentation editing
- Rongxi,Liu
 - Slide 7 including methodology and
 - biases and limitation info
- Shiyi
 - Record Slide 5, Slide 8
 - Data Collection, design for Slide 5
 - Script for Slide 4
- Racquel
 - Audio for slides 8, 9, 10
 - Content for Slides 8, 9, 10