



Integrated Mobility Plan

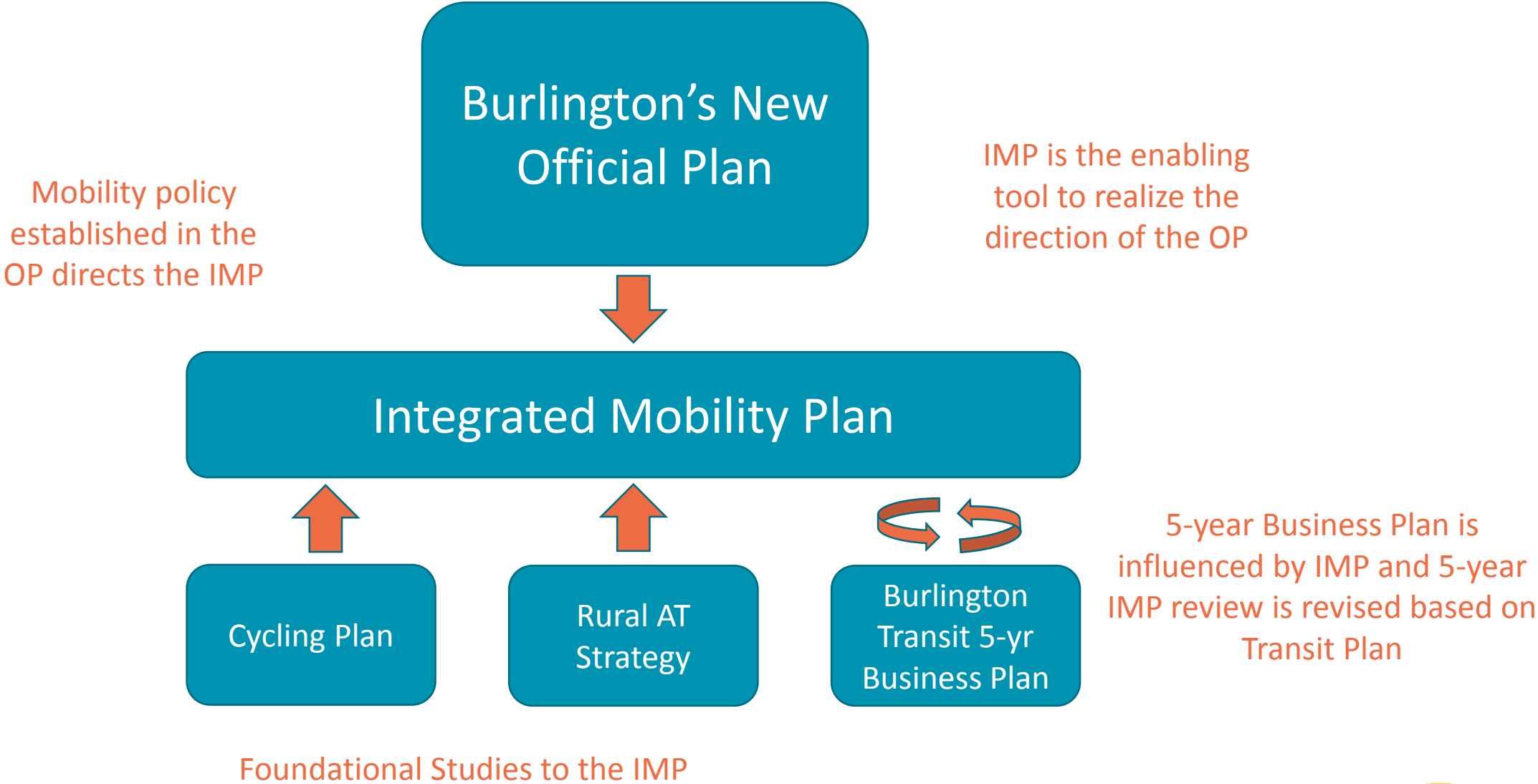
Sustainable Development Committee Meeting

May 19, 2021



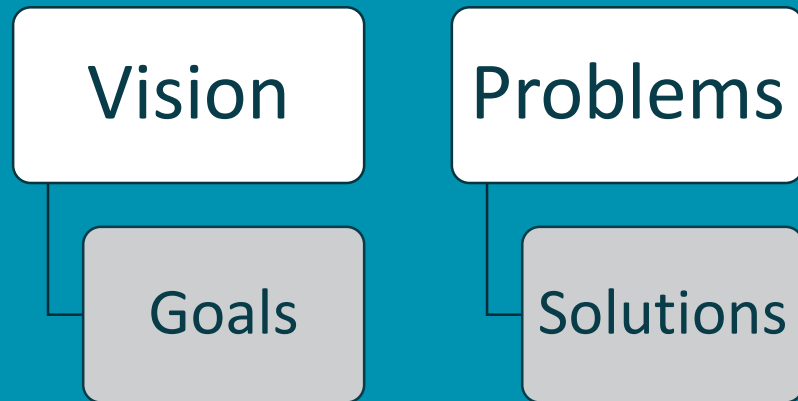
Philosophy

Alignment

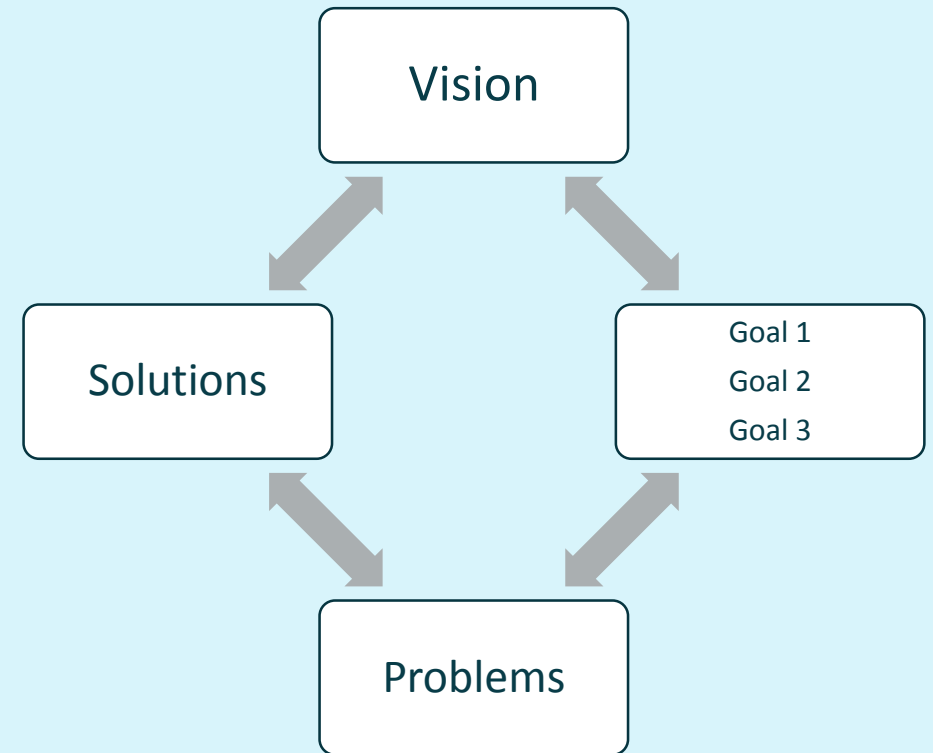


How this plan is different

Traditional TMP Network Based

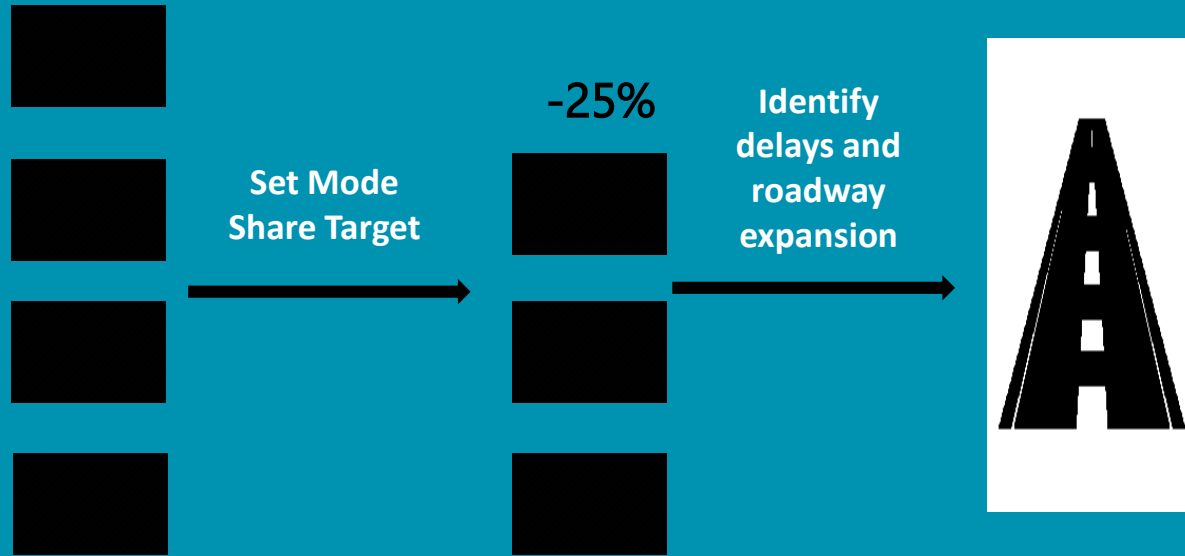


Integrated Plan System Based

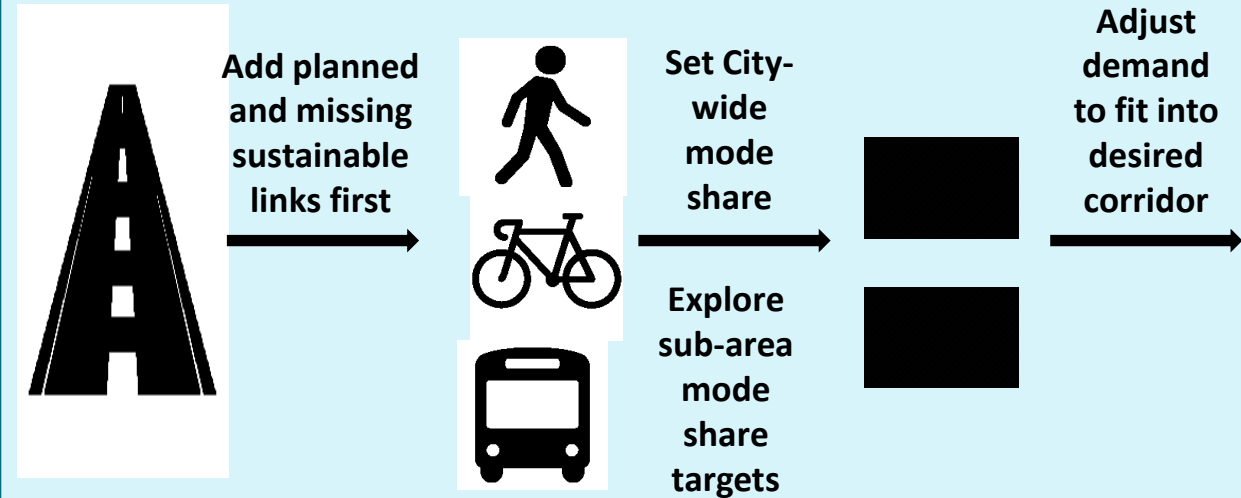


IMP Approach – Mode Shift

Traditional TMP

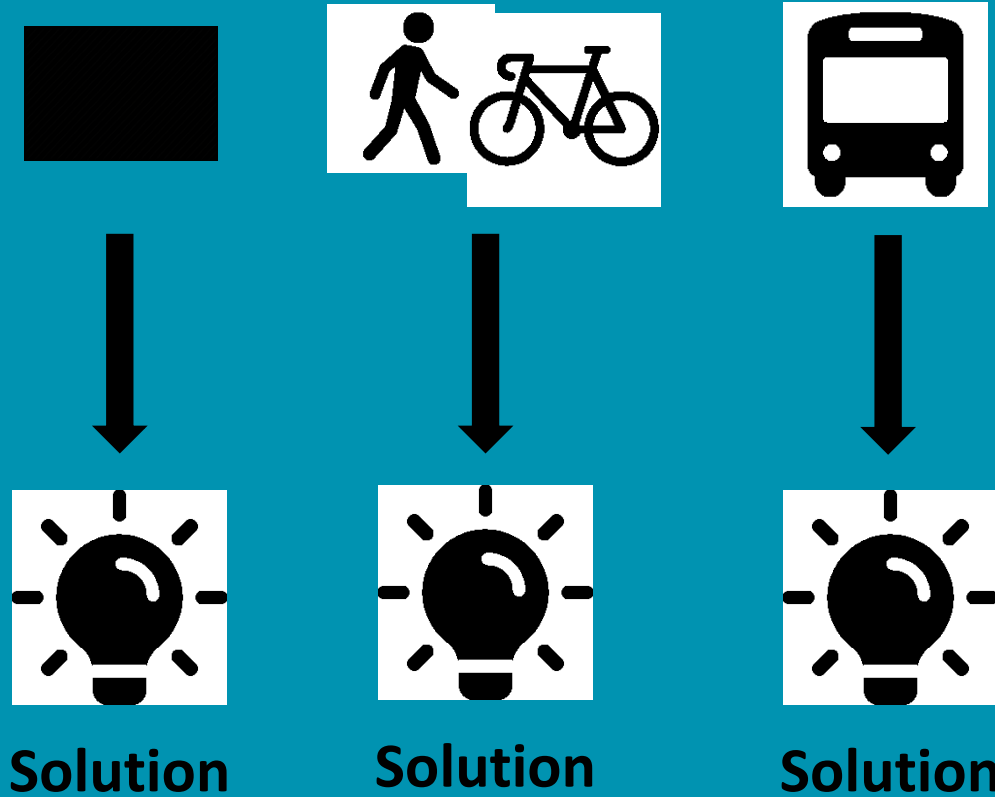


What Burlington IMP will do

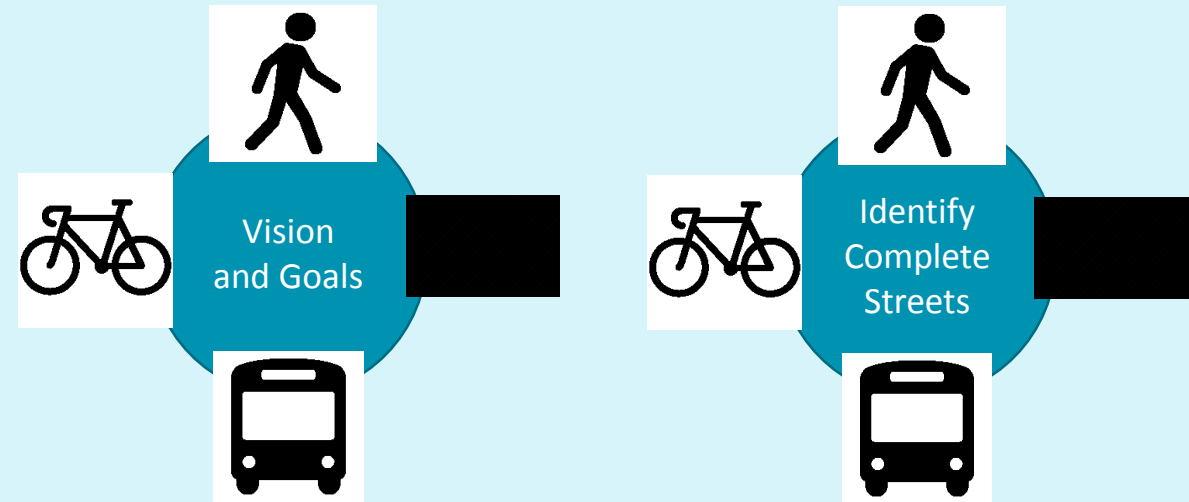


Integration of Mode Plans

Traditional TMP



What Burlington IMP will do



Work Completed to Date

- Phase 1 of the project is complete
- Currently undertaking Phase 2 activities:
 1. Development of Problem Statements
 2. Developing the *Ideal Mode Plans* for each mode
 3. Development of Alternate Solutions





Vision, Values & Goals

The background is a stylized map of Burlington, Vermont, with a grid of streets in orange, blue, and green. A large blue rectangle is centered on the map, containing the text. To the right of the rectangle are stylized green trees and a traffic light. At the bottom center is a yellow car.

Mobility in Burlington will be **safe, accessible, sustainable, balanced, and livable.**

Value Statements

Safe

- Movement of people + goods will be safe for all modes
- Focus on safety of vulnerable users
- Move towards eliminating transportation-related deaths and serious injuries

Accessible

- Getting around will be accessible to *all ages and abilities*
- Eliminate infrastructure/service gaps in multimodal networks
- Let people move when, where, and how they want

Sustainable

- Encourage transit, cycling, walking, and other non-car modes
- Leverage electrification potential

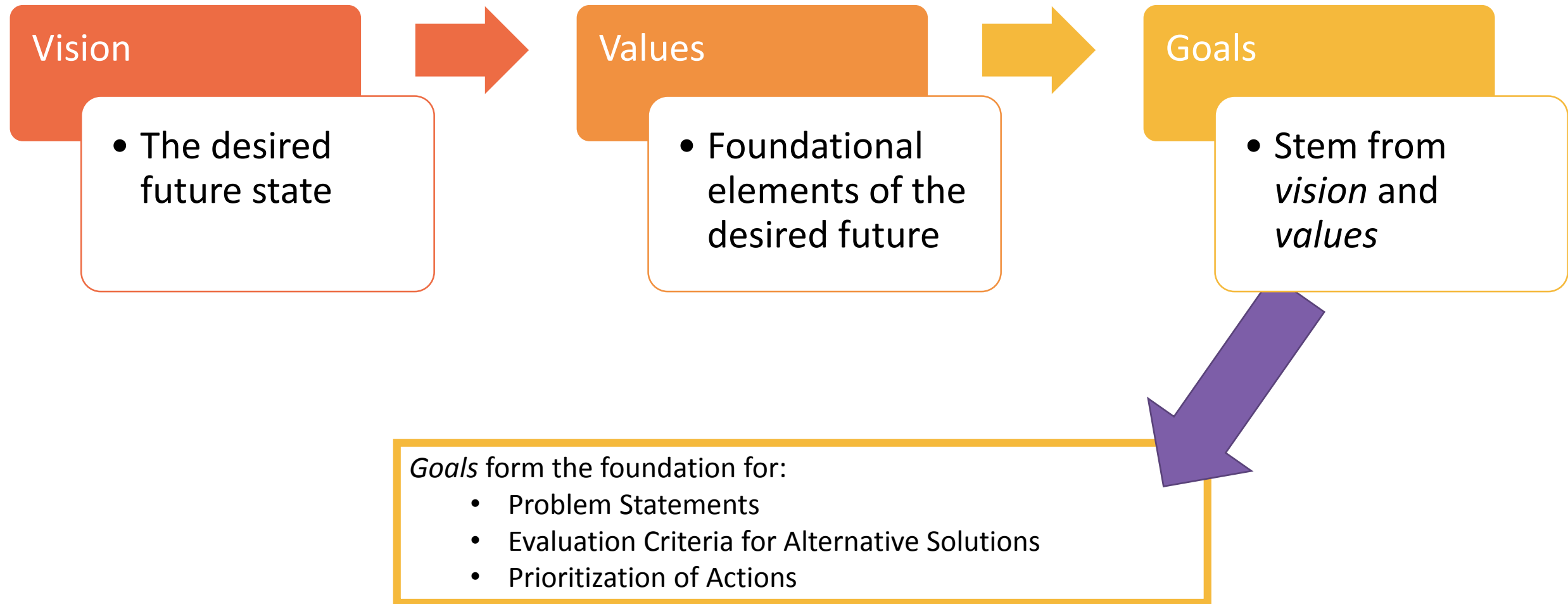
Balanced

- Prioritize travel by non-car modes
- Allow comfortable travel for all modes

Liveable

- Design streets to fit within their surroundings
- Use streets to support the environment and character in surrounding neighbourhoods

Roles of the *Vision*, *Values*, and *Goals*



1. Burlington will eliminate transportation-related deaths and serious injuries.
2. Burlington's transportation system will be accessible and reliable for users regardless of factors like age, ability, income, or familiarity with the city.
3. Burlington will provide high-quality transportation options to move people and goods wherever and whenever, while maintaining a high quality of life for residents.
4. Burlington will eliminate transportation-related carbon emissions.
5. Burlington's streets will support the intended roles of the communities they run through and help these communities be vibrant and prosperous.
6. Burlington will actively plan for the transportation changes of tomorrow while continuing to deliver great service today.

Safe

Accessible

Balanced

Accessible

Balanced

Sustainable

Balanced

Liveable

Sustainable

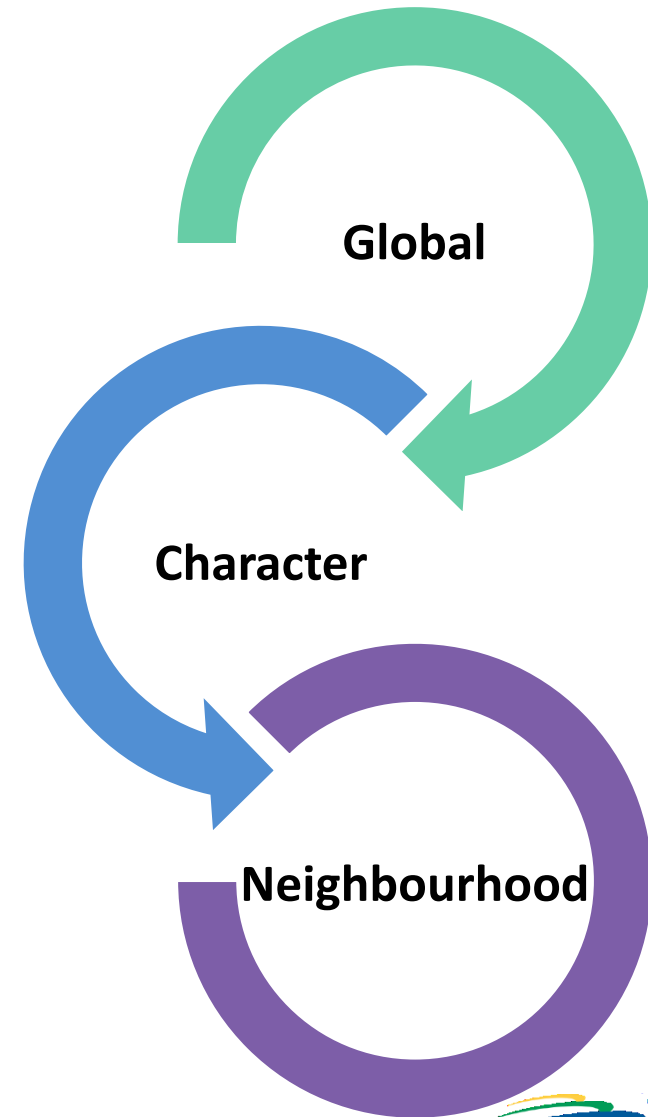
Balanced

Accessible

Questions on Work Completed?

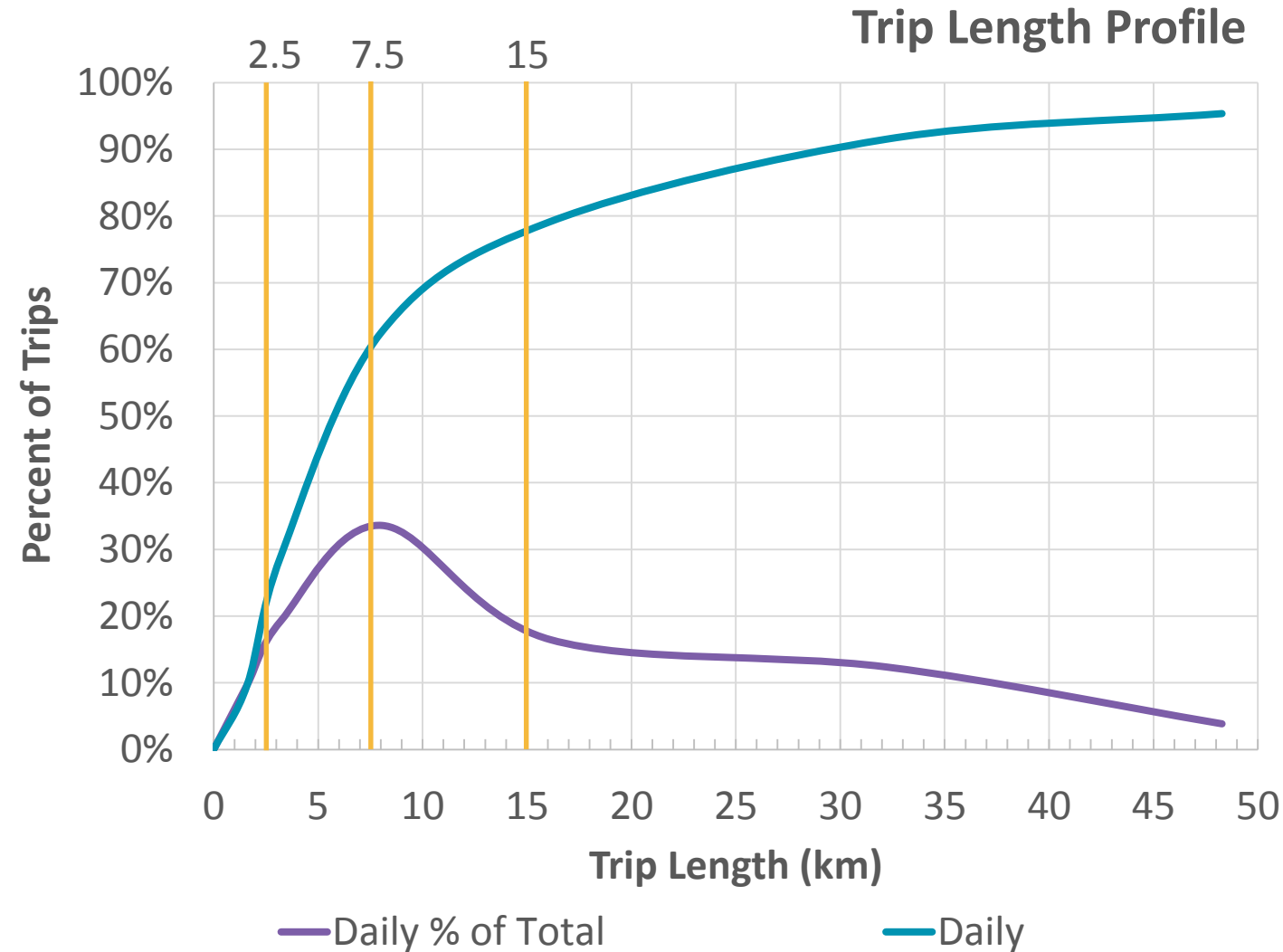
Mode Share Profile

- Most shift as at the core of the IMP philosophy
- The *Mode Share Profile* sets out context-sensitive targets for different parts of the city
- It identifies mode share targets at three different layers:
 - *Global*, or city-wide targets
 - *Character*, or land use type targets
 - *Neighbourhood*, or sub-area targets



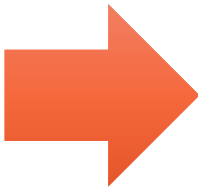
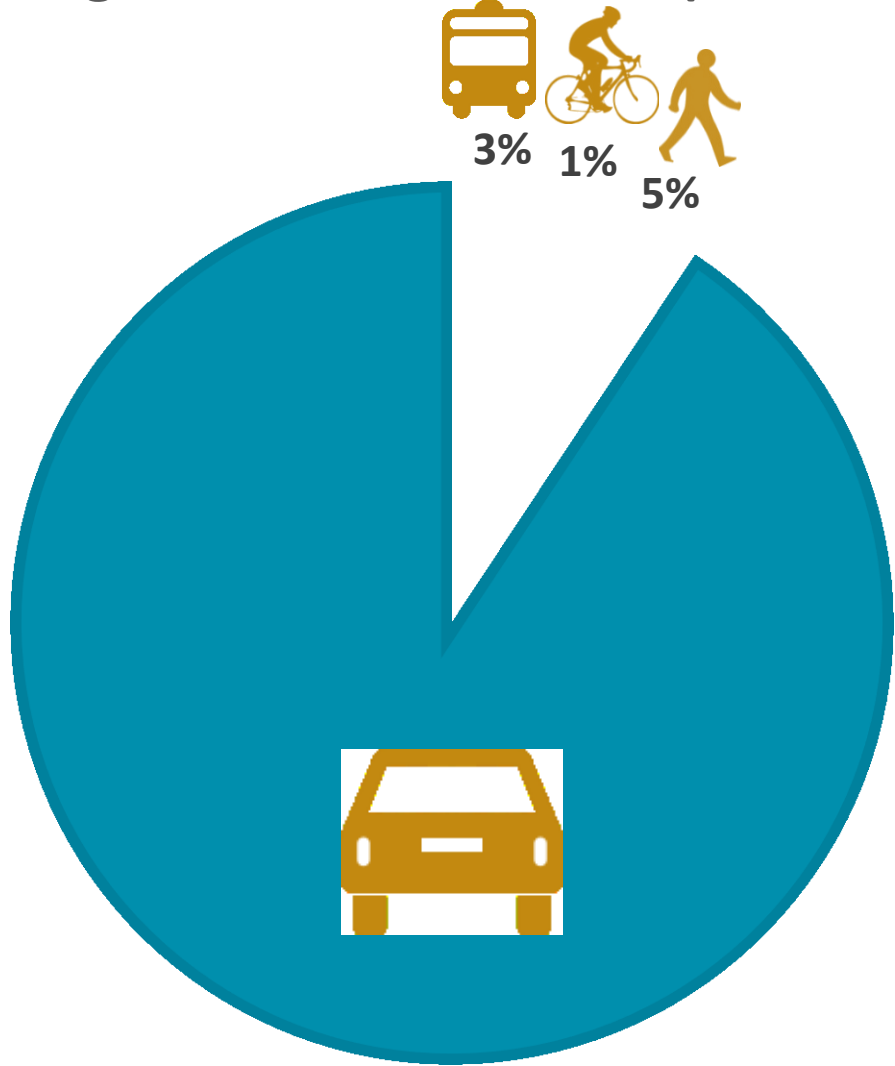
Mode Shift Potential

- Targets were developed by considering:
 - Existing mode shares
 - Neighbourhood characteristics
 - Existing and planned trip conditions for different modes
 - Mode Share Potential based on trip length

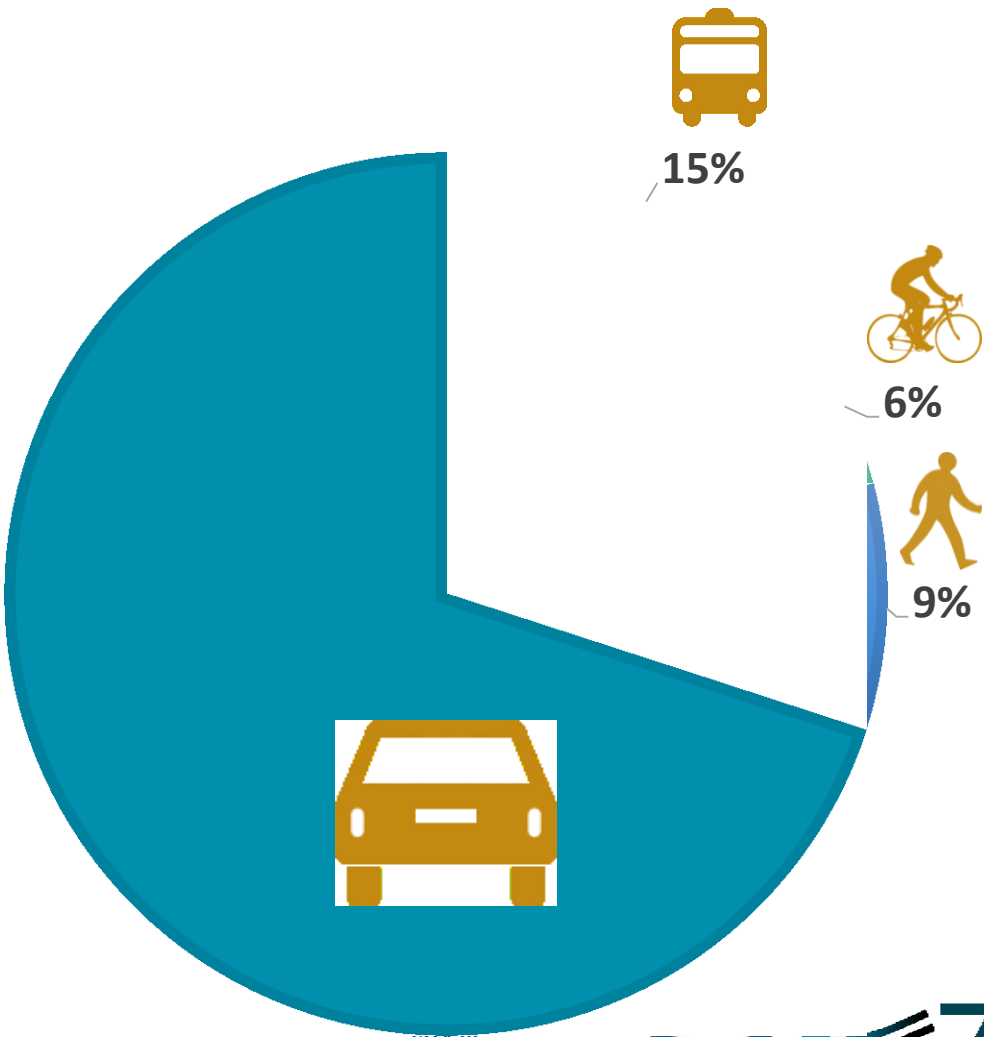


Global Mode Shares

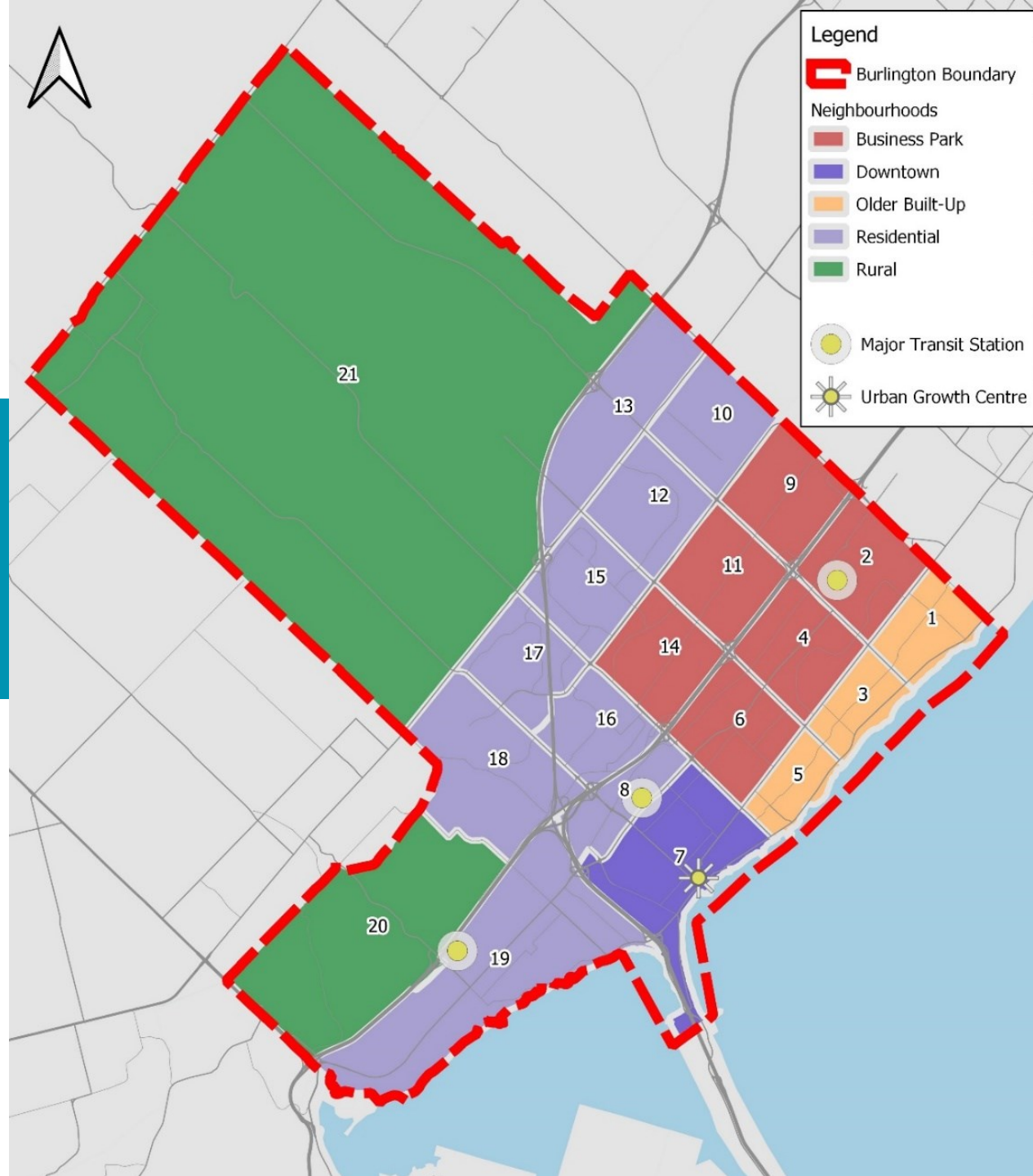
Existing Global Mode Shares (2016 TTS)



2051 Global Mode Share Targets



Breakdown of Neighbourhoods

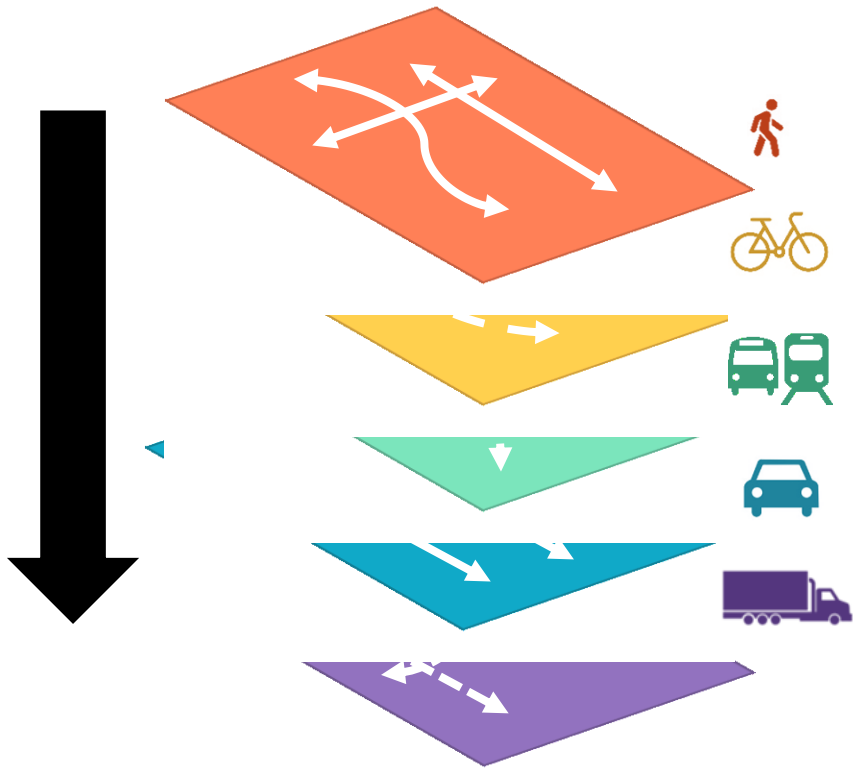


2051 Mode Share Targets – Character and Neighbourhood

Mode Share Layer	Existing Mode Share (TTS)				Mode Share Targets			
	A	T	B	W	A	T	B	W
Global (All Trips)	91%	3%	1%	5%	70%	15%	6%	9%
Downtown	90%	3%	2%	4%	50%	16%	15%	19%
Residential	91%	3%	0%	5%	72%	15%	5%	8%
Rural / Developing	98%	2%	0%	0%	96%	3%	1%	0%
Older Built-Up Area	88%	3%	3%	6%	70%	15%	6%	9%
Business Park	91%	3%	1%	6%	75%	15%	3%	7%

Mode Share Layer			Existing Mode Share (TTS)				Mode Share Targets			
			A	T	B	W	A	T	B	W
1	ELIZABETH GARDENS	Older Built-Up	92%	3%	1%	5%	73%	15%	4%	8%
2	PINEDALE*	Business Park	89%	3%	1%	7%	72%	17%	3%	8%
3	SHORE ACRES	Older Built-Up	87%	4%	4%	5%	69%	15%	8%	8%
4	LONGMOOR	Business Park	85%	4%	1%	10%	71%	15%	3%	11%
5	ROSELAND	Older Built-Up	85%	3%	3%	8%	68%	15%	6%	11%
6	DYNES	Business Park	94%	3%	1%	3%	78%	15%	3%	4%
7	CENTRAL*	Downtown	90%	3%	2%	4%	50%	16%	15%	19%
8	PLAINS*	Residential	92%	5%	0%	3%	72%	17%	5%	6%
9	CORPORATE	Business Park	89%	3%	0%	7%	73%	15%	3%	9%
10	THE ORCHARD	Residential	88%	4%	0%	8%	69%	15%	5%	11%
11	TANSLEY	Business Park	96%	1%	1%	2%	81%	14%	3%	2%
12	MILLCROFT	Residential	93%	2%	1%	4%	74%	14%	5%	7%
13	ALTON VILLAGE	Residential	85%	3%	1%	11%	67%	15%	5%	13%
14	PALMER	Business Park	90%	2%	1%	7%	75%	14%	3%	8%
15	HEADON FOREST	Residential	87%	3%	1%	10%	69%	14%	5%	12%
16	MOUNTAINSIDE	Residential	97%	1%	0%	2%	77%	13%	5%	5%
17	BRANT HILLS	Residential	88%	4%	0%	8%	70%	15%	5%	10%
18	TYANDAGA	Residential	96%	3%	0%	1%	77%	15%	5%	3%
19	ALDERSHOT*	Residential	95%	2%	1%	3%	73%	17%	5%	5%
20	ALDERSHOT N	Rural	98%	1%	1%	0%	97%	2%	1%	0%
21	RURAL BURLINGTON	Rural	97%	3%	0%	0%	95%	4%	1%	0%

Upcoming Deliverable - Ideal Mode Plans



- Dillon is developing the draft *Ideal Mode Plans* for walking, cycling, transit, truck, and cars
- Each Mode Plan shows the desired + unconstrained long-term network for that mode, in isolation of other modes
- Mode Plans will be overlaid on top of each other, identifying areas of necessary trade-offs
- Different combinations of the different Mode Plan elements will lead to Alternative Solutions

Network Planning Parameters (aka Guidelines)

- *Network Planning Guidelines* are the fundamental parameters of network design for each *Ideal Mode Plan*
- Each of the proposed Guidelines connect directly to the IMP Goals



Pedestrian Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guidelines
Goal 1	Pedestrian network is safe	A pedestrian facility on at least one side of the road is provided on all streets OR street design is modified to create safe environment for mixed traffic
Goal 3 Goal 4	Ped network promotes walking	Generous sidewalk width and short block lengths provided in high volume areas
		Distance between crossings of major barriers does not exceed 1km*

Cycling Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guidelines
Goal 1	Cycling network is safe	Corridor “priority level” is continued through intersections (policy)
		Cycling facilities meet Book 18 requirement (policy)
Goal 2 Goal 3 Goal 4	Cycling network promotes cycling for a broad population of cyclists	Spine Network is AAA (Spine Network is similar to arterials for cars)
		Crossings of major barriers does not exceed 2000m

Transit Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guidelines
Goal 3 Goal 4	Transit service attracts car trips	Transit service in urban areas is competitive with car travel
Goal 4	Transit network minimizes bus delays	Transit network permits/accommodates priority measures (like dedicated lanes, queue jump lanes, transit signal priority, etc.) in high activity corridors and/or in corridors where transit is the preferred first commuter option

Truck Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guideline
Goal 1	Truck network separates trucks safely from conflicts with other modes	Vehicle lanes are separated from pedestrians and cyclists
Goal 3 Goal 5	Truck network connects high activity truck areas (i.e. industrial areas) to freeways	<i>Permissive or Restrictive</i> truck routes connect industrial areas to freeways and have wide curb lanes

Cars Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guidelines
Goal 3	Car mobility network is complete	Arterial network connects all neighbourhoods to freeways
Goal 1	Car mobility network is safe	Arterial network is made up of three to four lanes
Goal 2	Car mobility network avoids gridlock	Peak period car demands are limited to built capacity (V/C > 1.2)

All Modes Network Planning Guidelines

Relationship to IMP Goals	Performance Objective	Network Planning Guideline
Goal 6	Street network is resilient	Core arterial network has a minimum ROW, which protects for future options/flexibility of space*
Goal 3	Street network are integrated/complete	Policy statement - supports development of prioritization process

Next Steps



Enabling Strategy

1. Develop remaining four Lived Experience Papers
2. Publish Existing Conditions and Strategic Directions StoryMap in June 2021 for public engagement

Network Strategy

1. Finalize the network planning parameters
2. Submit draft Ideal Mode Plans for each mode for technical review
3. Develop Alternative Solutions and Evaluation Criteria
4. Engage with public on Problem Statements, Alternative Solutions, and Evaluation Criteria in July 2021