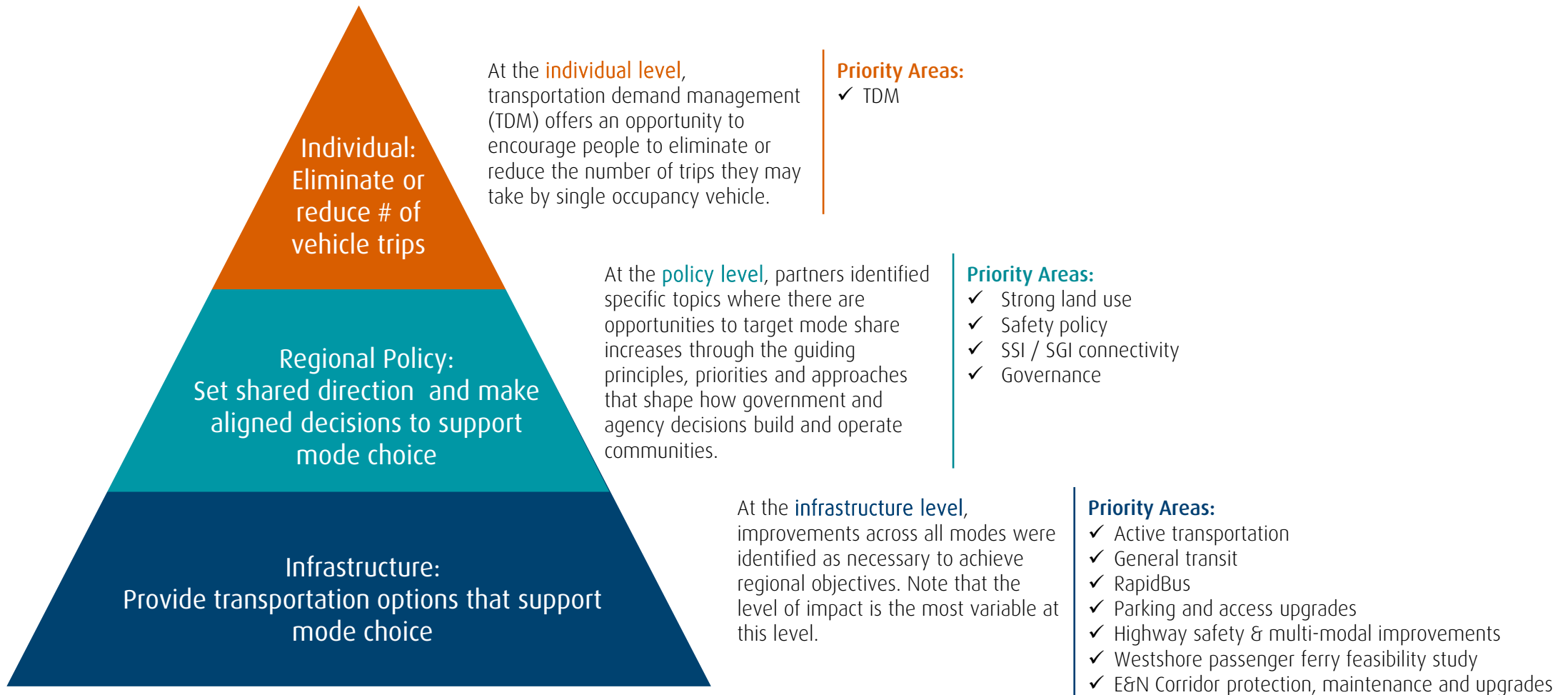


Levels of Action by Transportation Priority Area

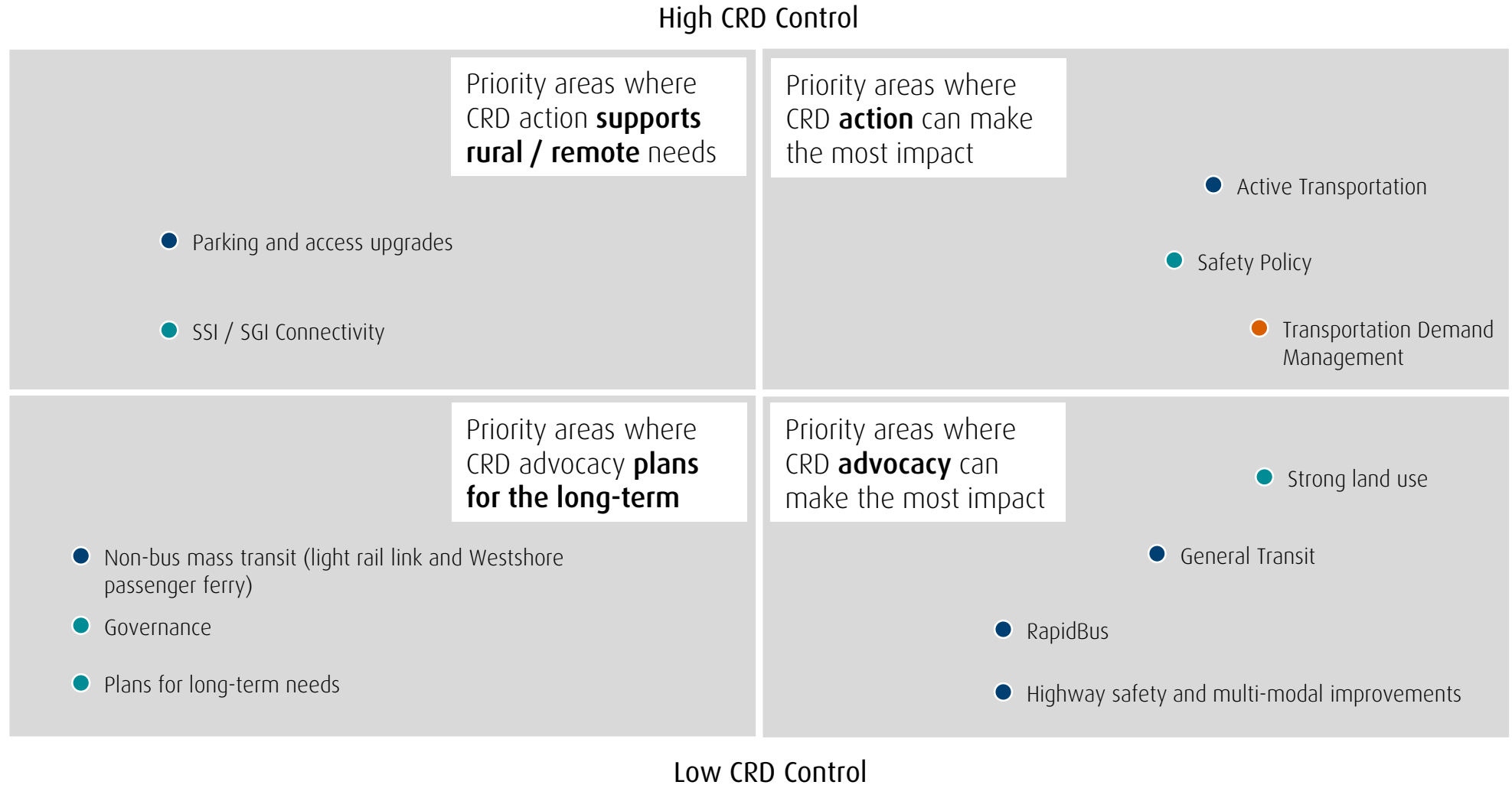
Infrastructure alone is not enough for people to choose to walk, wheel or take transit more often to get to the places they want to go. Interventions are needed at the individual level so that people know how to use the infrastructure and at the policy level so that the infrastructure is safe, consistent and connected in a network.

The pyramid below shows the nested opportunities for interventions to achieve regional objectives for reducing congestion, improving mode choice and taking action on climate, based on the regional transportation priority areas.



Levels of Impact by Transportation Priority Area

The table below shows the results of the impact analysis for each priority area, grouped in relation to how much control the CRD has to affect change.



- Legend**
- Individual
 - Policy
 - Infrastructure

Low Impact To Advance Objectives

High Impact To Advance Objectives

Low CRD Control

Evaluation Methodology

Notes on Methodology

The evaluation methodology is high-level as the priority areas are at the problem definition level rather than project design or facility / service option development. The evaluation methodology was chosen based on the following considerations:

- It is not possible to assign costing, trip volumes, travel time, vehicle kilometres travelled or safety warrant values in a consistent manner across all the priority areas at the problem definition level.
- Industry best practice (e.g., MoTI Multiple Account Evaluation Framework) is to undertake high-level analysis for evaluation at the problem definition level.
- The intent of the analysis is not to evaluate the specific project merits associated with each priority area, but rather to identify the relative impact of each priority toward achieving regional objectives.
- Priority areas related to policy are compared against each other and priority areas related to infrastructure are compared against each other to recognize that each of these interventions require different actions.

When results of infrastructure priority areas are compared against each other, active transportation and general transit perform the best given their broad regional reach and potential to increase the most number of trips by walking, cycling or transit. When results of policy priority areas are compared against each other, TDM and land use perform the best given that they provide a regionally-based approach to addressing all the criteria.

Performance Score

Each priority area was evaluated against five criteria. The criteria measurements relate directly to the region’s transportation objectives. Each criteria is scored out of three, to give a total out of 15.

How does the priority area achieve regional outcomes?		
Criteria	Measure	Scoring: High (3/3), Medium (2/3), Low (1/3)
Mode Shift	Potential to increase # of trips by walking, cycling or transit	✓ Highest scores to priorities that have the potential to convert the largest number of vehicle trips. Dependent on the pool of new potential mode users, facility or service quality and network connectivity.
Climate Action	Potential to decrease GHG emissions toward regional targets	✓ Highest scores to priorities that can decrease GHG emissions. Dependent on degree to which priority supports fuel switch and mode shift.
Congestion	Potential to reduce travel time in AM / PM peak	✓ Highest scores to priorities that remove or mitigate the need for peak hour trips. Dependent on predominant frequency and timing of mode use.
Safety	Potential to increase safety	✓ Highest scores to priorities that improve mode, service or facility safety. Dependent on ability to increase a mode’s safety relative to existing.
Affordability	% income spent on transportation	✓ Highest scores to priorities that offer the potential to decrease percentage income spent on transportation. Dependent on comparison to cost of single occupancy vehicle ownership, operation and maintenance.
Total Performance Score		Sum total / 15

Population and Cost Factors

Population and cost factors were then applied to the performance score and added together for a total score out of 30.

What is the scale of impact, based on population served and relative cost?			
Multiplier	Population Total x multiplier / 15	Cost Total x multiplier / 15	Scoring: Sum total of both multipliers / 30
1	Regional	Low	Sum total of performance score x population multiplier + Sum total of performance score x cost multiplier
.5	Sub-regional	Medium	
.25	EA / Local	High	