

FREEway or FEEway?

Tolling Toronto's Busiest Expressways



Presenters



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01

Why was this study done?

02

What was this study about?

03

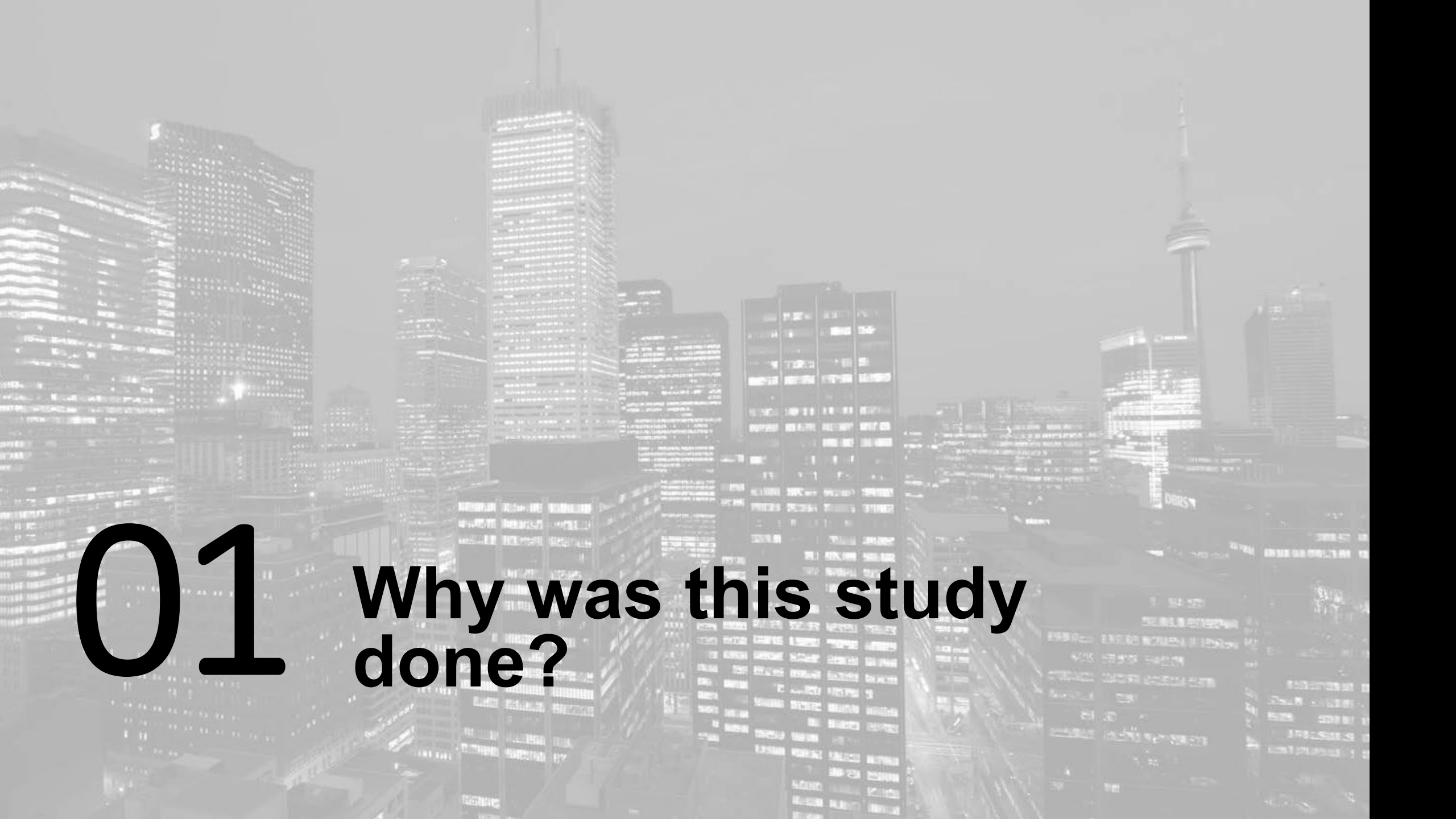
Key challenges and issues with tolling in the City of Toronto

04

Benefits and Impacts of Tolling

05

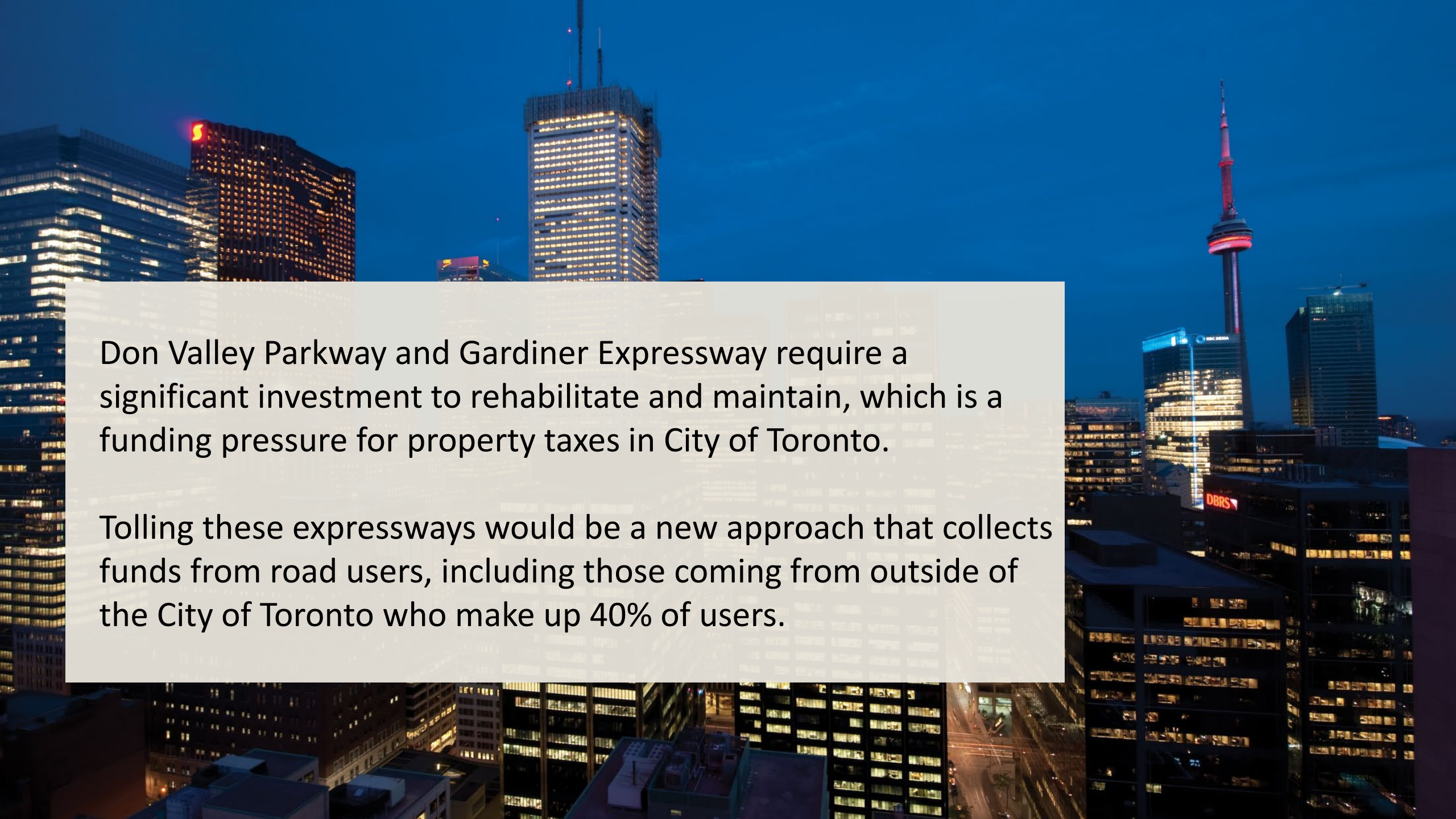
Lessons Learned



01 Why was this study done?

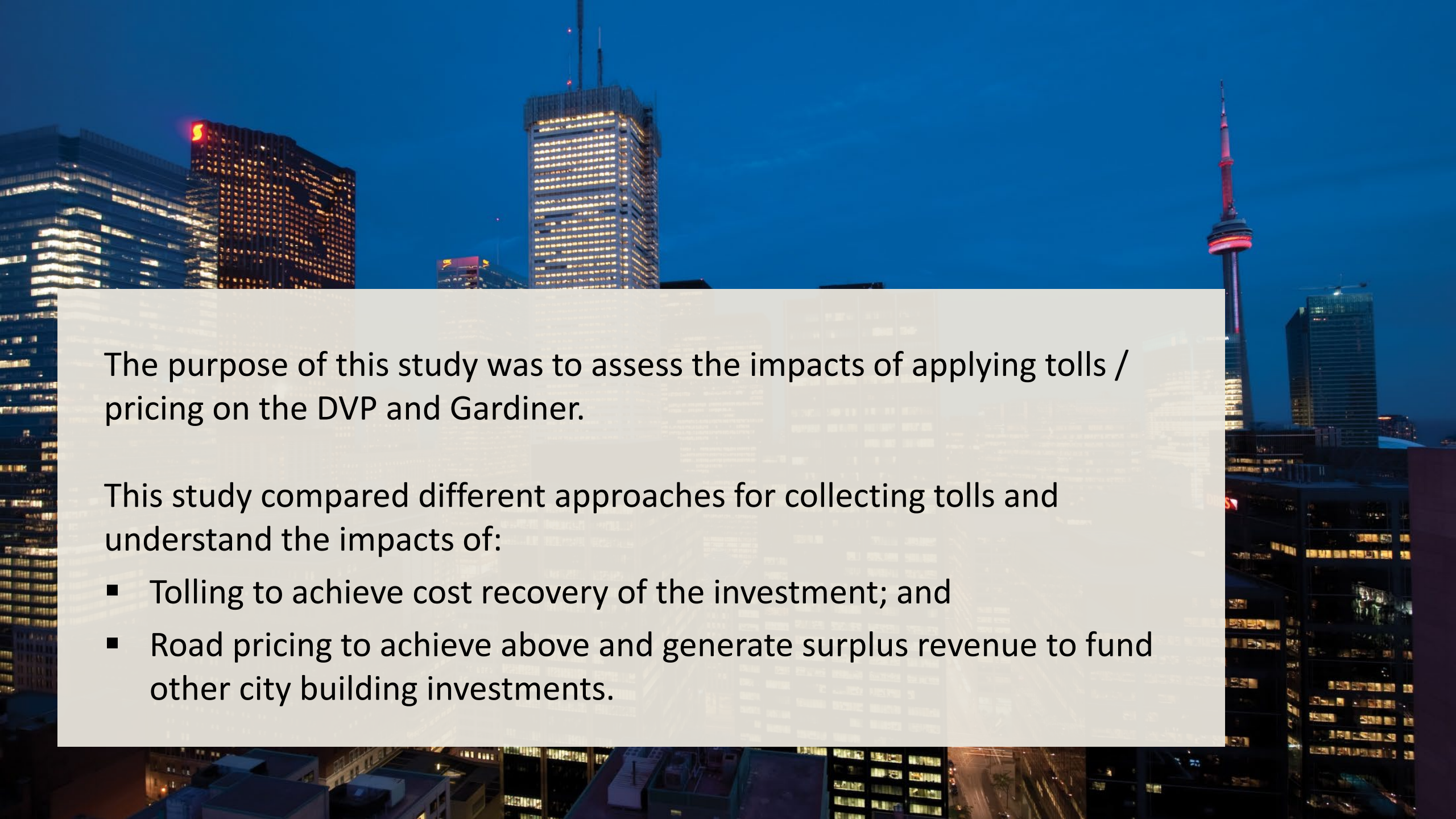
Study Corridors



A nighttime photograph of the Toronto skyline. The image shows several illuminated skyscrapers against a dark blue sky. The CN Tower is prominent on the right side, with its red and white lights. A semi-transparent white rectangular box is overlaid on the left and center of the image, containing two paragraphs of text.

Don Valley Parkway and Gardiner Expressway require a significant investment to rehabilitate and maintain, which is a funding pressure for property taxes in City of Toronto.

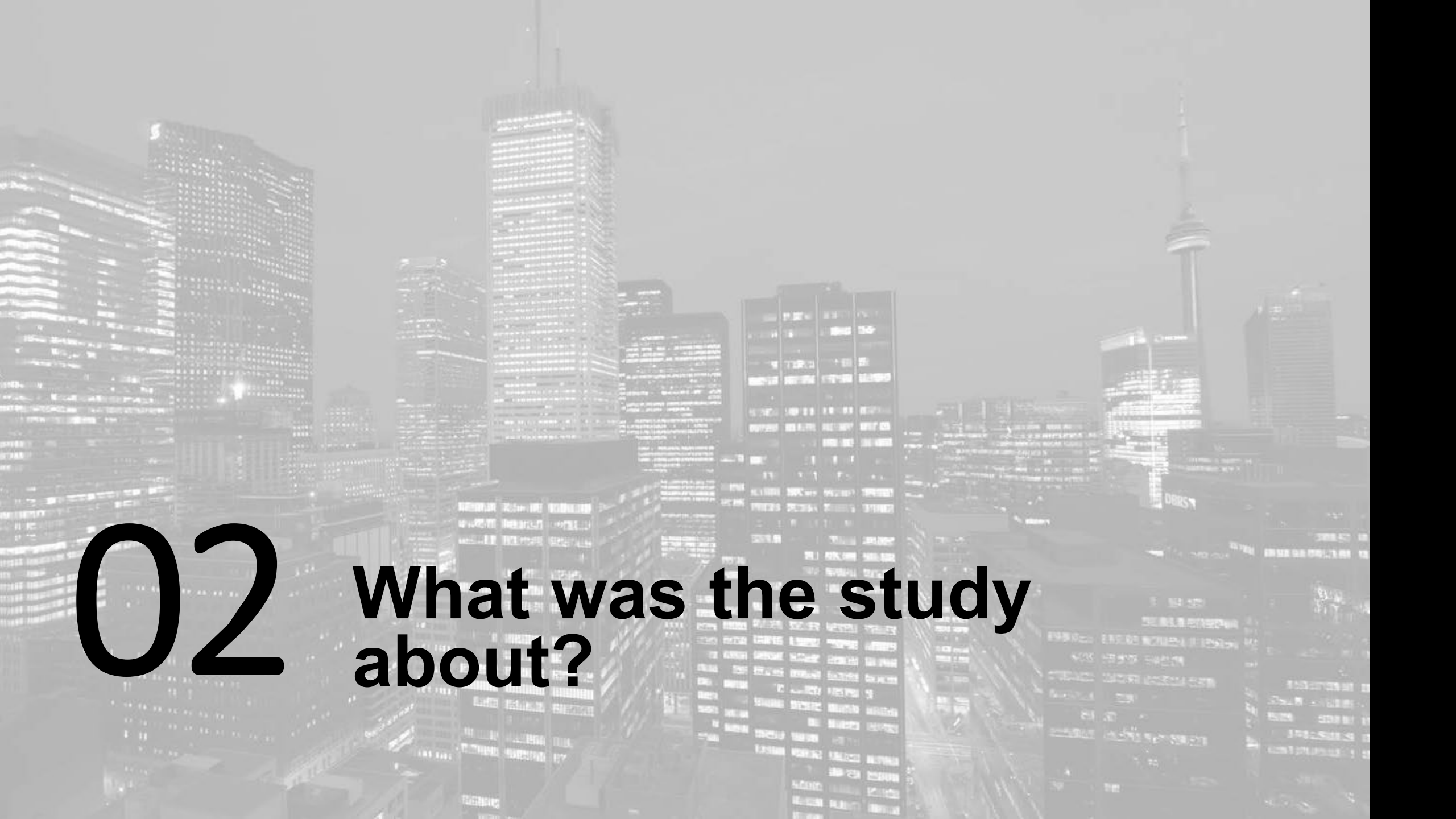
Tolling these expressways would be a new approach that collects funds from road users, including those coming from outside of the City of Toronto who make up 40% of users.

A nighttime photograph of a city skyline, likely Toronto, featuring several illuminated skyscrapers and the CN Tower on the right. The sky is a deep blue. A semi-transparent white box is overlaid on the lower half of the image, containing text.

The purpose of this study was to assess the impacts of applying tolls / pricing on the DVP and Gardiner.

This study compared different approaches for collecting tolls and understand the impacts of:

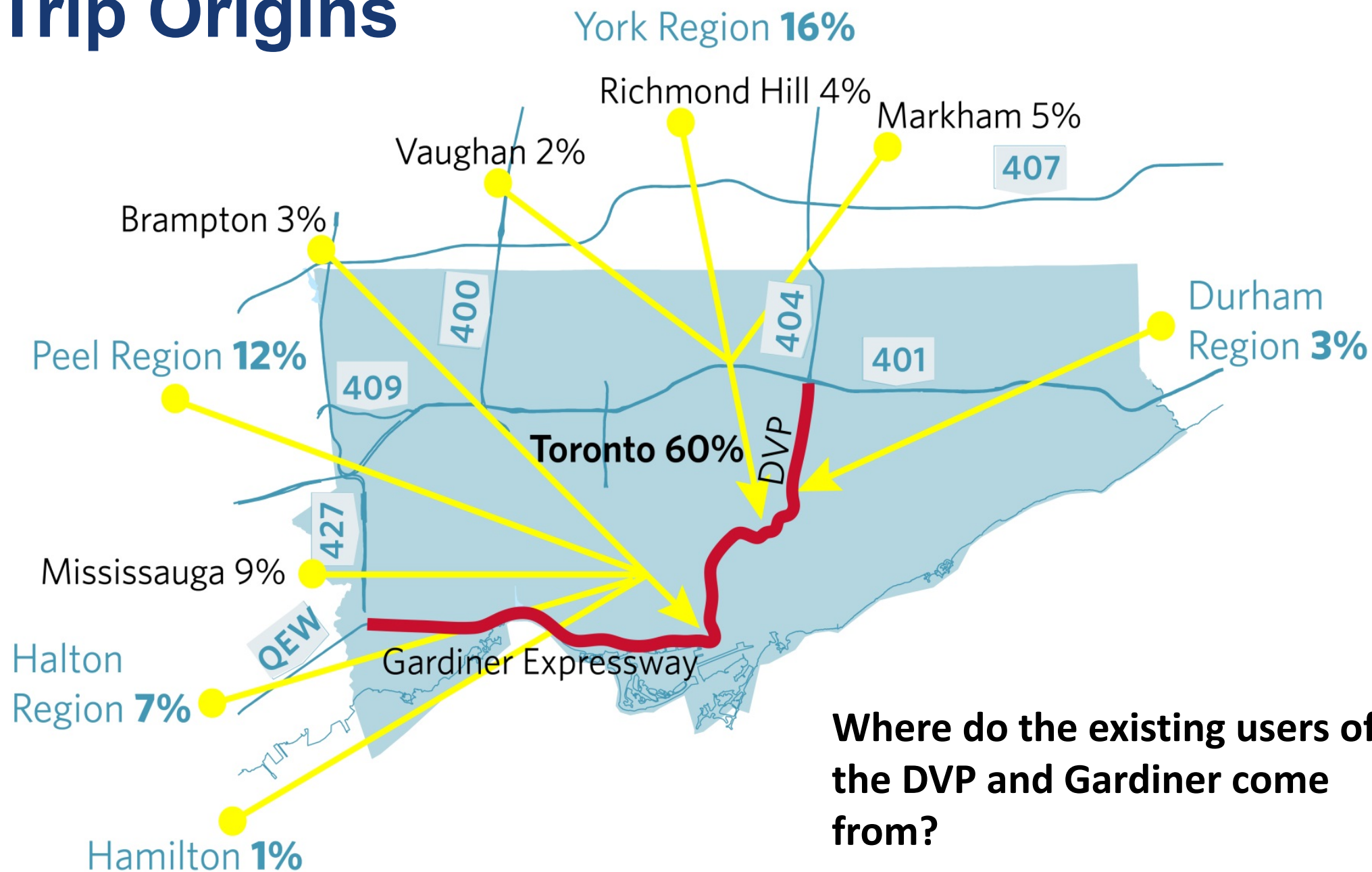
- Tolling to achieve cost recovery of the investment; and
- Road pricing to achieve above and generate surplus revenue to fund other city building investments.



02

**What was the study
about?**

Trip Origins



Where do the existing users of the DVP and Gardiner come from?

Quick Facts*



33 km

Total Length of the
DVP and Gardiner



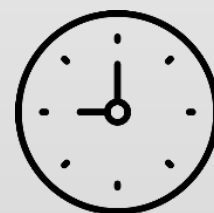
532,000

Daily users on the DVP
and Gardiner



9.4 km

Average trip length on the
DVP and Gardiner



10-25 min

Travel time for all trips
on the DVP and
Gardiner

*as of 2011



03

Key Challenges and Issues with Tolling in Toronto

Key questions

1. How much revenue could be generated through different toll level ranges?
2. How might tolling affect travel habits and patterns?
3. How might tolling affect rest of the transportation system?
4. How might tolling affect the economy?
5. What impacts might tolling have on the environment?
6. What impacts might it have on communities and the public?

Stakeholder Consultation

- Vital to obtain stakeholder buy-in before consulting with the public
- Held workshops with key stakeholders
 - Business Improvement Associations
 - Ontario Trucking Association
 - Hotel Association
 - Taxi industry
 - Uber
 - Beer industry
 - Board of Trade
 - Canada Automobile Association
 - Toronto Transit Commission
 - Cities adjacent to Toronto



How would tolls be collected?



All Electronic Tolling

- Tolls would be collected electronically using a transponder along with modern camera technology that can read license plates
- There would be no need to slow down or stop
- No cash would be used
- A toll bill would be mailed to the vehicle's license plate owner



















Could combine with 407ETR or Presto.



Funds would be received by the City and the roadways would remain City property.



Various Toll Scenarios were Tested

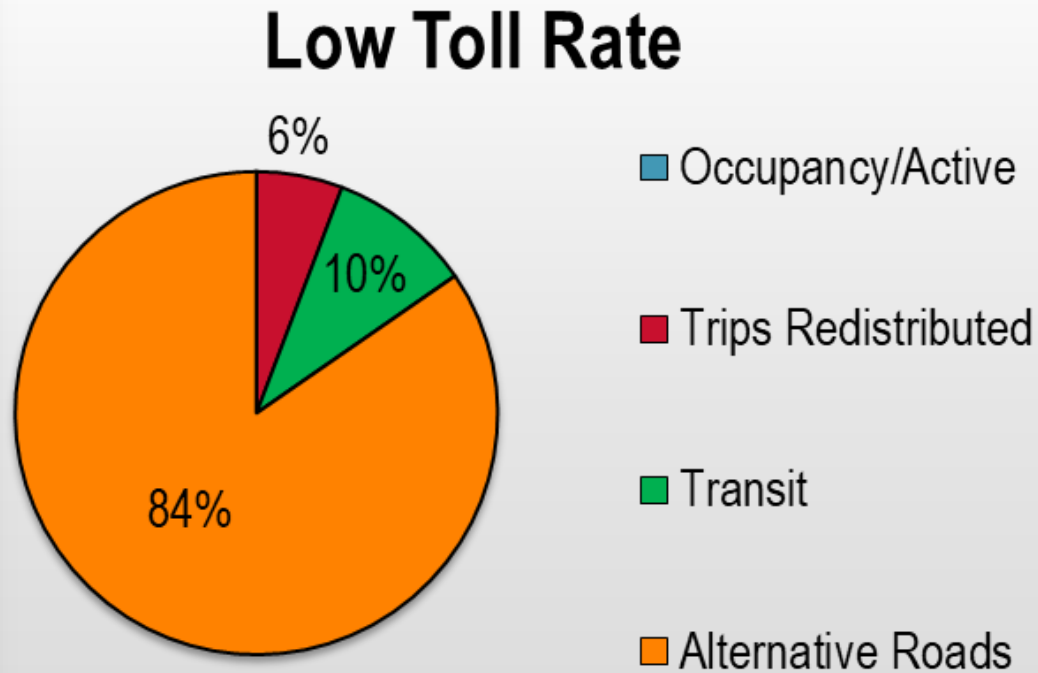
	Tolling Options		Rate Options	
	Distance-based Tolls	Flat Tolls	Fixed Toll Rate	Variable Toll Rate
1				
2				
3				
4				



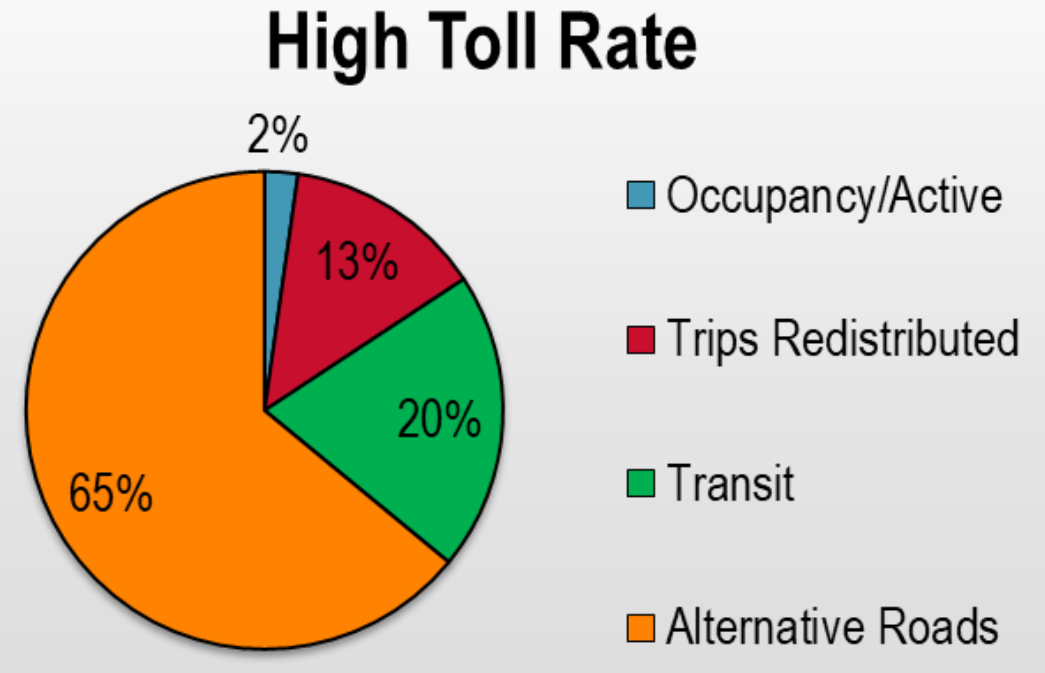
04

Benefits and Impacts of Tolling

Tolling Impacts: Where do trips divert to?



Total Daily Trips Diverted: 18%



Total Daily Trips Diverted: 31%

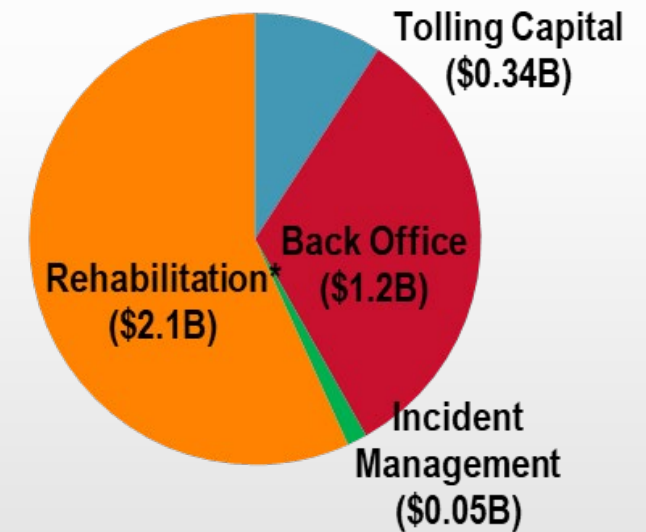
Determining Toll Rates

Toll rates set to meet a “revenue target” based on policy and cost objectives

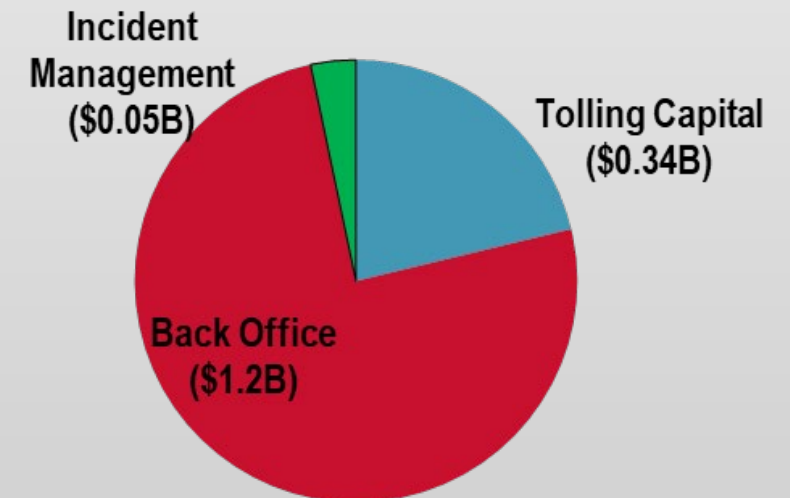
Revenue targets to recover:

- tolling and rehabilitation costs with high tolls.
- tolling and rehabilitation costs with low tolls.
- only tolling costs with high tolls.
- only tolling costs with low tolls.
- tolling costs and generate surpluses.

Cost Recovery of investment in DVP, Gardiner, and Tolling = \$3.7B

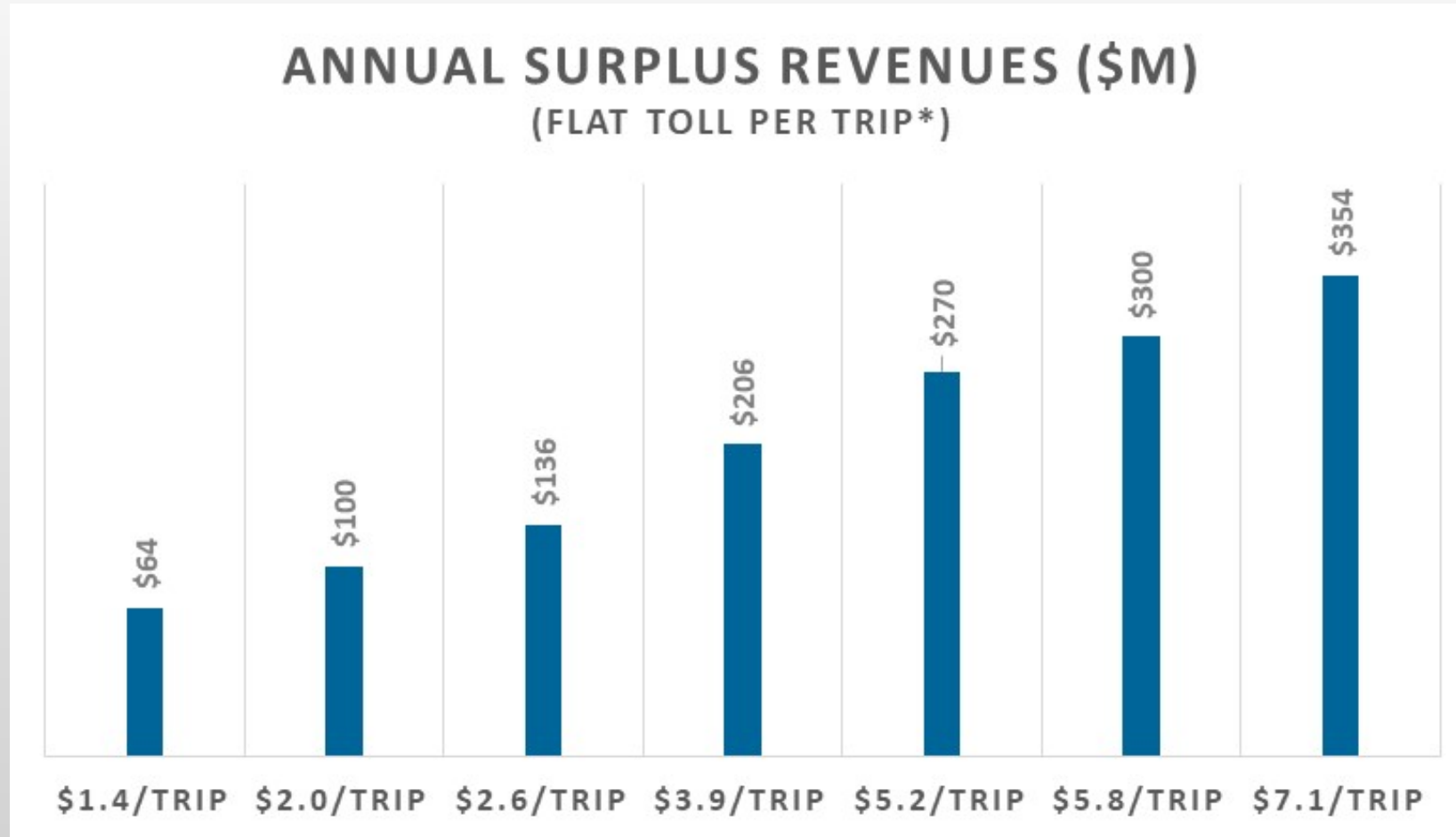


Tolling Cost Recovery Only = \$1.6B



Annual Surplus Revenues

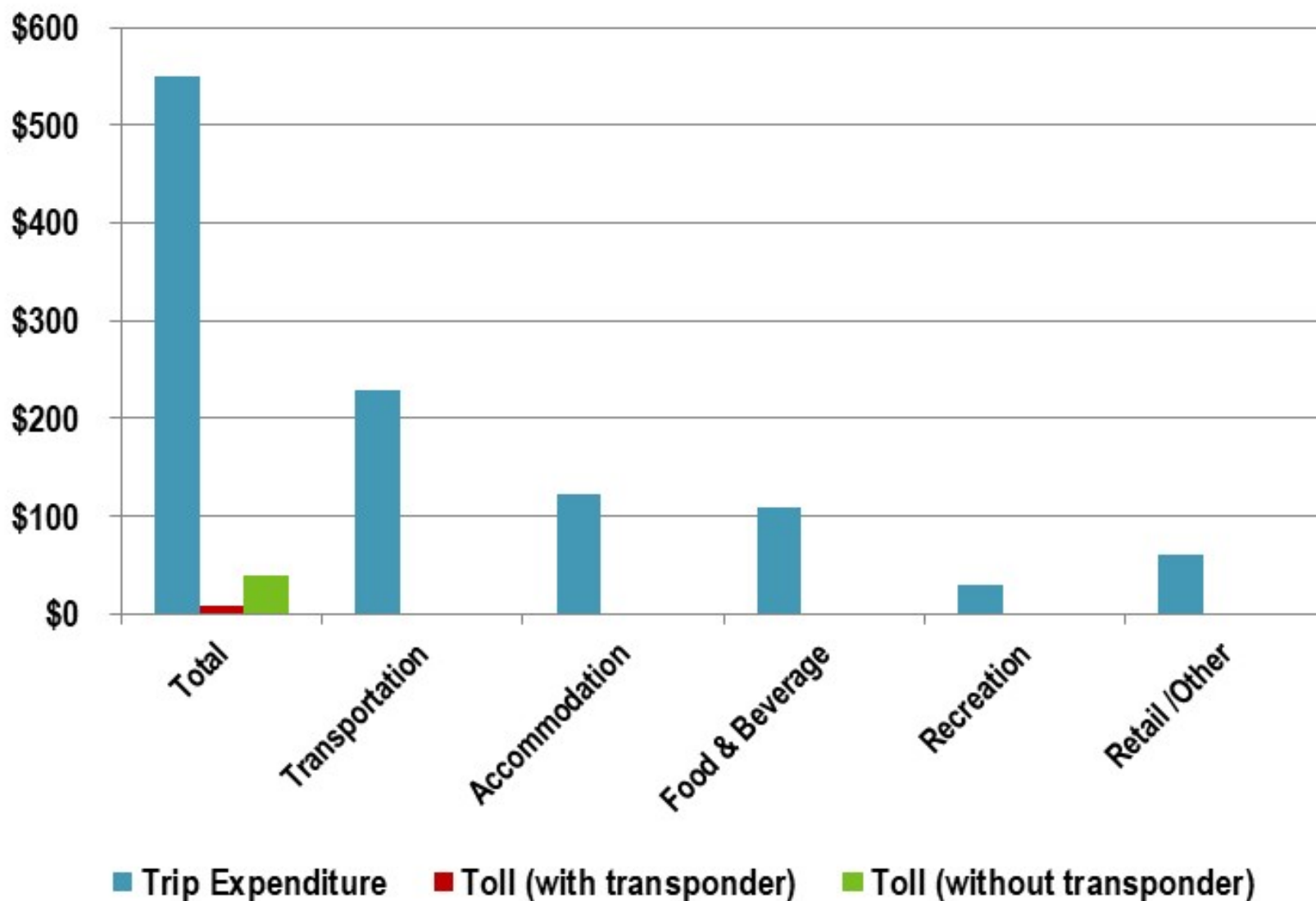
Recovery of tolling costs, maintenance, and generation of surplus
Annual surplus derived over 30 year life cycle.



* For light vehicles. Truck Toll Rate assumed to be 2x that of light vehicles

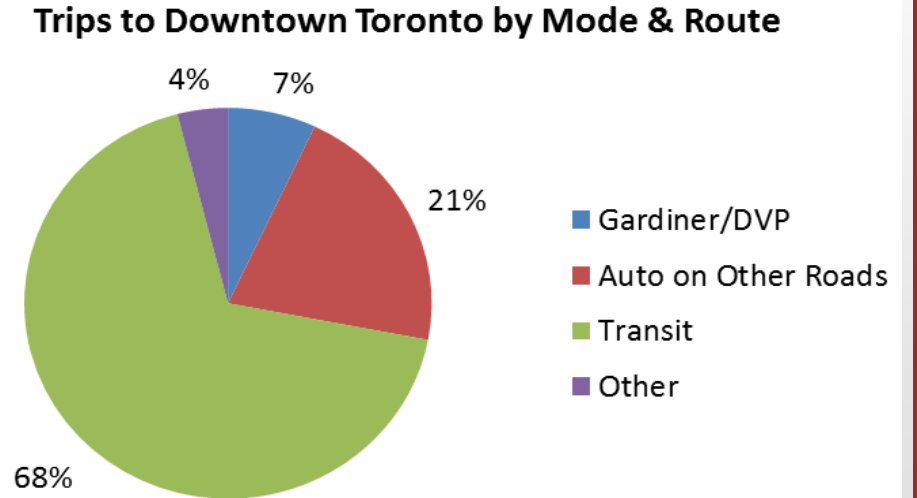
Stakeholder Issues: Impact on Tourism

- Price sensitivity, or price elasticity, of inbound tourist spending is small – small impact expected from increase in local prices
- Average tourist spends \$550 – toll rate minimal in that context
- Minimal impact on number of tourists visiting Toronto



Stakeholder Issues: Commercial Impacts

- Gardiner/DVP accounts for small share (7%) of total trips to downtown Toronto
- Many options for customers to travel to key destinations served by Gardiner/DVP; possible to avoid tolls
- Toll level is small compared to many other discretionary daily expenditures
- Transportation modeling of toll scenarios reveals overall no impact of tolling on number of person trips to downtown
- Overall impacts on businesses in Gardiner/DVP vicinity likely to be small



Risk Analysis

Workshop held with City to develop risk register

Project unique from risk perspective:

- Existing congested roadway
- Adjacent roads congested
- Pricing flexibility
- Financed through general borrowing

Key risks relate to:

- Politics: willingness to raise rates
- Cost estimates
- Delays
- City managing toll operations

#	Risk Category	Type	Description	Prob.	Impact
2	Traffic and Revenue	Competing facilities	Assumptions regarding the future transportation network (e.g., transit and highway projects) over the study period differ from forecast, changing the outlook for competing facilities.	Low	Low
10	Cost	Base cost estimates for AET Toll Zone infrastructure	AET Toll Zone Infrastructure cost estimates are Class C estimates.	Med.	Low
20	Procurement	Procurement	Difficulties during procurement phase leads to cost and schedule variances.	Med.	Med.
25	Public and Stakeholder Perception	Operational	Issues resolving customer disputes and set customer service objectives, resulting in negative publicity and perception.	High	Low
26	Public and Stakeholder Perception	Perception	Public disapproval of tolling the facilities resulting in delays and changes to the Project.	Med.	Low
28	Political / Legal	Political	Changes in elected officials result in changing priorities and differing opinions of tolling.	Accept Uncontrollable	



05

Lessons Learned

Why is tolling urban expressways in Toronto different than other toll highways elsewhere in North America?

- Politics
 - Final decision with the Province, not with the City of Toronto
 - Politics between those for and against tolls
- Demographics
- Sensitive neighbourhoods
- Low income and seniors
- Discounts and exemptions
- Downtown economic competitiveness
- Addressing impact to all business sectors
- Where do the tolls go?



QUESTIONS?