

SECURE INVESTMENT FOR ACTIVE TRANSPORTATION

Willingness to pay for secured bicycle parking in Montreal, Canada

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ABSTRACT

Fear of **bicycle theft** and related vandalism discourages bicycle usage. The present study recognizes this problem and aims to understand whether or not users are **willing to pay for secured bicycle parking** (SBP) in Montreal, Canada by examining the following research questions:

- 1) Are users willing to incur some of the extra cost of improving bicycle parking infrastructure?
- 2) Of those willing to pay, what are their common characteristics?
- 3) Is there a distinction between those who are willing to pay and those who are able to pay?
- 4) Among those who are willing to pay, what is the accepted amount?

Results from a bilingual (English/French) online bicycle theft and parking survey provided show that **43% would be willing to pay** at least \$0.50/day for SBP, and the highest daily amount that some participants are willing to pay is \$15.00.

Findings from this study demonstrate that cities will benefit from improving their cycling infrastructure by installing SBP facilities.

The results show that the pricing of SBP facilities can be an option, yet should stay low to ensure that security provided by **paid bicycle parking always remain an incentive to use a bicycle.**

METHOD

Contingent valuation (CV) / Willingness To Pay (WTP) Method

- Asks individuals to **place a price on a service**, and uses the stated prices to determine the value of a non-market good
- Used in the **absence of a price** for a good

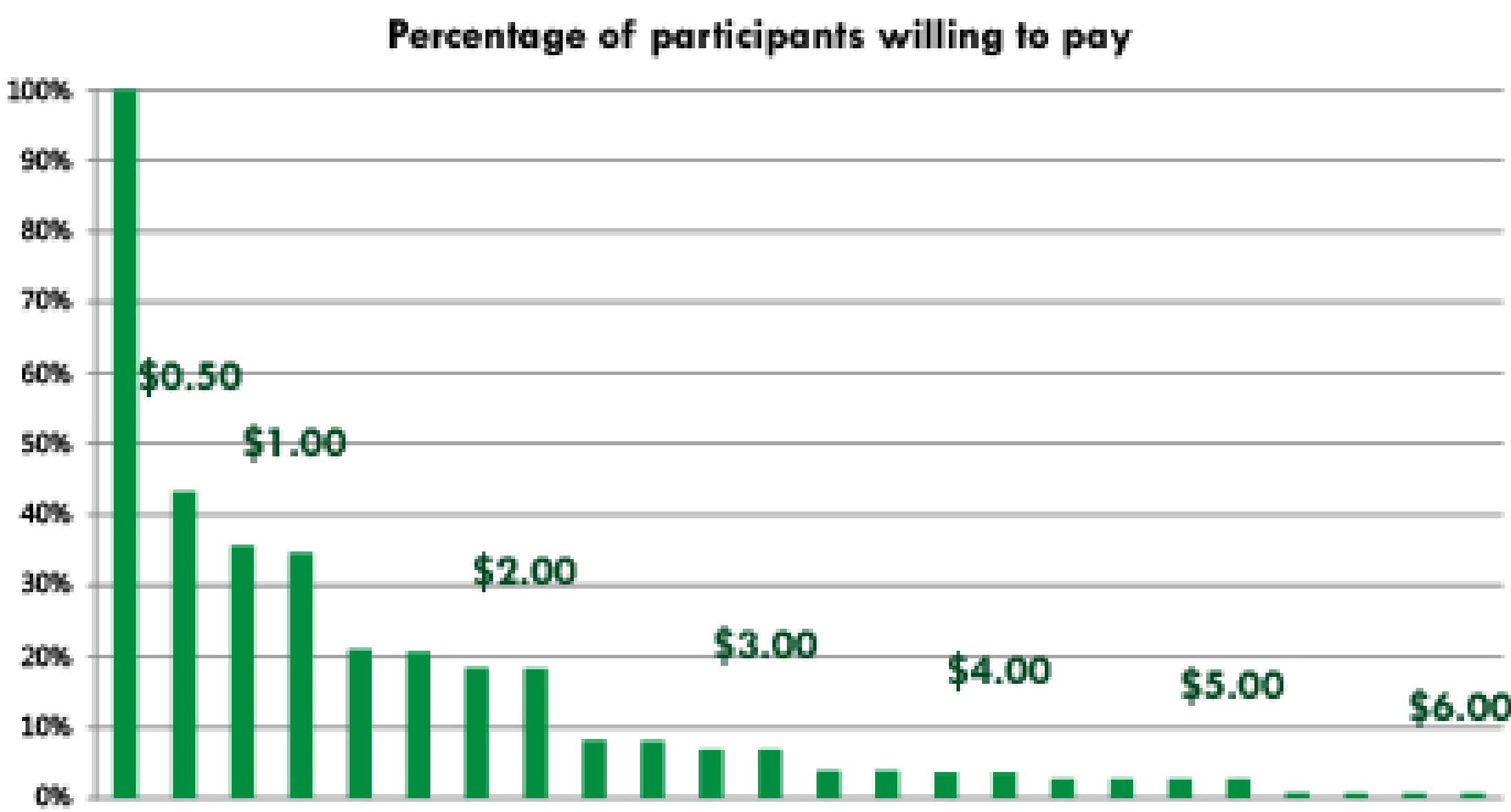
SURVEY DATA

- Online from May 9th – June 12th, 2012
- 2039 responses
- 1533 usable responses
- 665 WTP (43%)

Summary Statistics

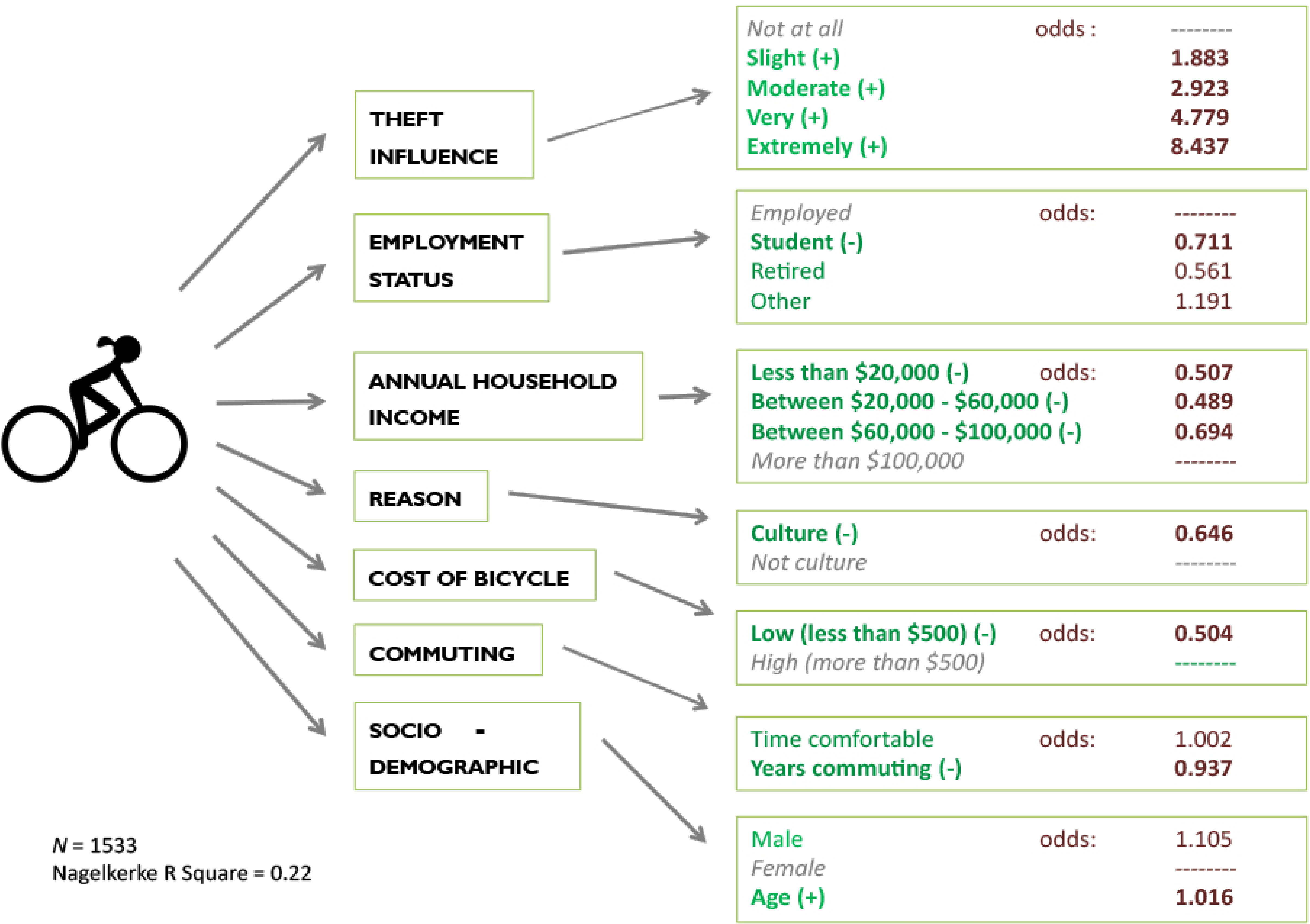
	2012 Bicycle Theft Survey				2008 Origin-Destination Survey (Adult)			
	General	WTP Logit						
	All survey respondents	Willing To Pay	Not Willing to Pay		Bicyclists	All		
GENDER								
Male	58% (1,037)	63% (416)	55% (479)	65% (1,029)	47%	(58,890)		
Female	42% (738)	37% (249)	45% (389)	35% (548)	53%	(65,563)		
AGE								
Average Age	37	39	36	42	48			
18-29	30% (542)	26% (175)	31% (270)	24% (372)	16%	(19,750)		
30-39	37% (658)	35% (234)	39% (342)	22% (343)	16%	(20,182)		
40-49	17% (301)	17% (110)	16% (140)	25% (395)	21%	(25,929)		
50-64	14% (254)	20% (130)	11% (99)	24% (371)	28%	(34,983)		
65+	2% (41)	2% (16)	2% (17)	6% (96)	19%	(23,609)		
HOUSEHOLD SIZE								
One	21% (369)	20% (131)	21% (182)	22% (346)	15%	(18,203)		
Two	43% (755)	42% (275)	44% (379)	34% (539)	38%	(47,008)		
Three	19% (335)	19% (129)	19% (160)	20% (310)	19%	(24,121)		
Four	12% (213)	13% (83)	12% (102)	17% (270)	19%	(23,788)		
Five or More	6% (100)	7% (44)	4% (38)	7% (112)	9%	(11,333)		
OCCUPATION								
Employed	71% (1263)	80% (533)	70% (608)	68% (1070)	58%	(71,544)		
Student	21% (370)	14% (93)	24% (207)	13% (200)	8%	(9,872)		
Retired	3% (50)	3% (18)	3% (22)	11% (181)	25%	(31,057)		
Other	6% (100)	3% (21)	4% (31)	8% (126)	10%	(11,936)		
INCOME (household)								
<\$20,000	14% (245)	9% (59)	16% (143)	15% (186)	12%	(10,217)		
\$20,000 - \$60,000	36% (618)	29% (192)	40% (346)	46% (588)	44%	(38,726)		
\$60,000 - \$100,000	26% (450)	31% (204)	26% (225)	26% (334)	28%	(24,688)		
>\$100,000	23% (391)	32% (210)	18% (154)	13% (166)	17%	(15,009)		
						124,453		
N*	1,922	665	868	1,577	(all modes)			

How much would you be willing to pay for secured bicycle parking?



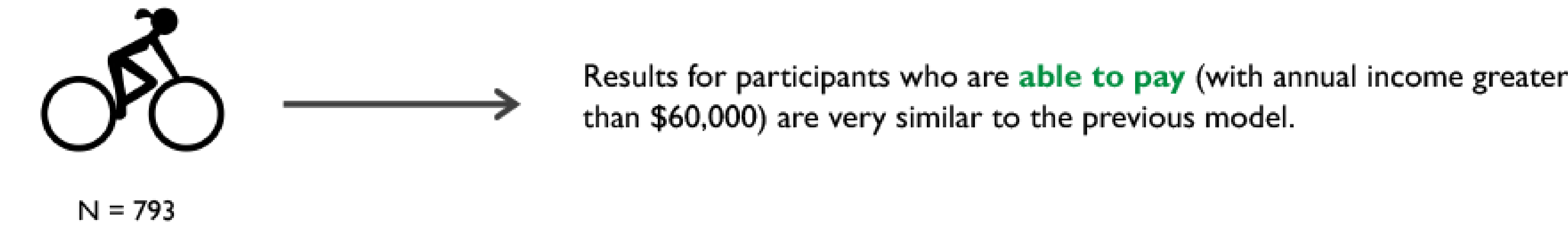
ANALYSIS

Model 1: (binary logit) Odds of an individual being willing to pay for parking



N = 1533
Nagelkerke R Square = 0.22

Model 2: (binary logit) Odds of an individual being willing to pay for parking (participants with annual income greater than \$60,000 only)



CONCLUSIONS

This study contributes to improving cycling in the region by:

- Providing the City of Montreal and the Société de transport de Montréal with **dollar values** that cyclists would be willing to pay for secured bicycle parking.
- Developing an understanding of the **characteristics** of cyclists who would be willing to pay.

The next phase of research will aim to understand:

- Where secured bicycle parking should be located
- How often cyclists would be willing to use the service
- What kind of secured bicycle parking cyclists would prefer
- What is the relationship between bike share programs and bicycle parking

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