Appendix

Table A1. Montreal public transit mode share percentage regression models for all commuters

Predictors	**Model 1A** **Cumulative opp. [x10,000] (Mean TT)**		**Model 2A** **Gravity-based [x10,000] (Fisk decay parameter)**		**Model 3A** **Shen-type (Log-Logistic decay parameter)**		**Model 4A** **Spatial availability [x10,000] (Log-Logistic decay parameter)**	
	Coef.	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*
Intercept	19.07 *	2.17 – 35.96	21.28 *	5.03 – 37.53	44.88 ***	26.48 – 63.27	55.63 ***	32.92 – 78.35
Accessibility								
Accessibility measure	**0.70** ***	0.52 – 0.88	**0.83** ***	0.65 – 1.01	**5.86** ***	3.30 – 8.42	**14.15** *	3.24 – 25.07
Accessibility measure squared	**-0.01** ***	-0.01 – -0.00	**-0.01** ***	-0.01 – -0.00	**-0.31** ***	-0.45 – -0.16	**-3.82** *	-7.04 – -0.61
WFH employees (%)	**-0.93** **	-1.50 – -0.36	**-0.79** **	-1.36 – -0.22	**-0.73** **	-1.24 – -0.22	**-0.46** *	-0.90 – -0.02
Age (avg)	0.07	-0.19 – 0.33	-0.08	-0.35 – 0.18	-0.25	-0.52 – 0.02	**-0.31** *	-0.61 – -0.01
Household size (avg)	0.32	-2.06 – 2.70	-0.35	-2.93 – 2.23	**-5.32** ***	-8.42 – -2.23	**-8.38** ***	-12.08 – -4.67
Built environment								
Population density (1000/km²)	**0.54** **	0.15 – 0.93	**0.37** ***	0.15 – 0.59	**1.11** ***	0.47 – 1.75	**1.23** ***	0.54 – 1.93
Distance to Station (km)	**-0.53** ***	-0.72 – -0.34	**-0.31** ***	-0.48 – -0.15	**-0.78** ***	-1.05 – -0.51	**-0.85** ***	-1.19 – -0.51
Observations	944		944		944		944	
R2 / R2 adjusted	**0.768 / 0.767**		**0.794 / 0.792**		**0.683 / 0.681**		**0.657 / 0.655**	

– The accessibility measure corresponds to the Model name.
* p<0.05 ** p<0.01 *** p<0.001

Table A2. Montreal public transit mode share percentage regression models for low-income commuters

Predictors	**Model 1L** **Cumulative opp. [x10,000] (Mean TT)**		**Model 2L** **Gravity-based [x10,000] (Log-Logistic decay parameter)**		**Model 3L** **Shen-type (Log-Logistic decay parameter)**		**Model 4L** **Spatial availability [x10,000] (Log-Logistic decay parameter)**	
	Coef.	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*
Intercept	7.29	-16.27 – 30.85	10.89	-10.36 – 32.15	48.28***	28.46 – 68.10	57.31***	36.78 – 77.84
Accessibility								
Accessibility measure	**3.44*** **	2.51 – 4.37	**3.96*** **	3.10 – 4.83	**3.44**	-0.29 – 7.16	**7.25**	-50.19 – 64.69
Accessibility measure squared	**-0.10*** **	-0.14 – -0.06	**-0.11*** **	-0.14 – -0.07	**-0.22**	-0.52 – 0.07	**-2.76**	-85.57 – 80.04
WFH employees (%)	-1.05***	-1.41 – -0.70	-0.85***	-1.20 – -0.49	-0.65**	-1.14 – -0.16	-0.48*	-0.92 – -0.04
Age (avg)	0.34	-0.01 – 0.68	0.12	-0.23 – 0.47	-0.09	-0.42 – 0.23	-0.15	-0.48 – 0.18
Household size (avg)	2.74	-1.42 – 6.89	1.70	-2.03 – 5.42	-6.45**	-10.67 – -2.24	-8.45***	-12.60 – -4.30
Built environment								
Population density (1000/km²)	0.46	-0.15 – 1.08	0.24	-0.14 – 0.62	1.35**	0.35 – 2.35	1.40**	0.37 – 2.42
Distance to Station (km)	-0.70***	-1.01 – -0.40	-0.40**	-0.65 – -0.16	-1.13***	-1.59 – -0.67	-1.17***	-1.66 – -0.68
Observations	944		944		944		944	
R2 / R2 adjusted	**0.709 / 0.706**		**0.750 / 0.749**		**0.588 / 0.585**		**0.580 / 0.577**	

– The accessibility measure corresponds to the Model name.
* p<0.05 ** p<0.01 *** p<0.001

Table A3. Vancouver public transit mode share percentage regression models for all commuters

Predictors	Model 1A **Cumulative opp. [x10,000] (Mean TT)**		Model 2A **Gravity-based [x10,000] (Fisk decay parameter)**		Model 3A **Shen-type (Log-Logistic decay parameter)**		Model 4A **Spatial availability [x10,000] (Log-Logistic decay parameter)**	
	Coef.	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*
Intercept	35.05 **	10.68 – 59.41	35.76 **	10.10 – 61.42	41.54 **	14.72 – 68.37	28.17	-7.79 – 64.12
Accessibility								
Accessibility measure	**1.07** ***	0.71 – 1.42	**0.86** ***	0.50 – 1.23	**0.89**	-0.17 – 1.96	**17.92** *	2.35 – 33.49
Accessibility measure squared	**-0.02** **	-0.03 – -0.01	**-0.01**	-0.02 – 0.00	**-0.02** *	-0.04 – -0.00	**-7.79** *	-14.06 – -1.52
WFH employees (%)	-0.42 *	-0.77 – -0.08	-0.37 *	-0.68 – -0.06	-0.31	-0.71 – 0.10	-0.25	-0.63 – 0.13
Age (avg)	-0.2	-0.52 – 0.12	-0.21	-0.52 – 0.10	-0.05	-0.42 – 0.33	0.11	-0.34 – 0.56
Household size (avg)	-2.99	-6.90 – 0.92	-3.3	-7.65 – 1.05	-4.66 *	-8.98 – -0.35	-3.12	-8.52 – 2.28
Built environment								
Population density (1000/km²)	-0.06	-0.38 – 0.26	-0.06	-0.36 – 0.25	0.26	-0.47 – 0.99	0.22	-0.46 – 0.90
Distance to Station (km)	-0.38 **	-0.66 – -0.10	-0.42 **	-0.67 – -0.17	-0.97 ***	-1.30 – -0.65	-0.92 ***	-1.21 – -0.63
Observations	463		463		463		463	
R2 / R2 adjusted	**0.718 / 0.714**		**0.693 / 0.688**		**0.548 / 0.541**		**0.561 / 0.555**	

– The accessibility measure corresponds to the Model name.
* p<0.05 ** p<0.01 *** p<0.001

Table A4. Vancouver public transit mode share percentage regression models for low-income commuters

Predictors	**Model 1L** **Cumulative opp. [x10,000] (Mean TT)**		**Model 2L** **Gravity-based [x10,000] (Log-Logistic decay parameter)**		**Model 3L** **Shen-type (Log-Logistic decay parameter)**		**Model 4L** **Spatial availability [x10,000] (Log-Logistic decay parameter)**	
	Coef.	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*	*Coef.*	*95% CI*
Intercept	40.26*	7.51 – 73.00	41.62*	7.68 – 75.55	48.70**	11.80 – 85.60	29.91	-14.65 – 74.47
Accessibility								
Accessibility measure	**5.35*** **	4.29 – 6.40	**4.36*** **	2.85 – 5.87	**0.49**	-0.39 – 1.37	**91.44** **	27.78 – 155.11
Accessibility measure squared	**-0.28*** **	-0.36 – -0.20	**-0.20***	-0.36 – -0.04	**-0.00**	-0.01 – 0.00	**-143.36** **	-248.67 – -38.04
Work from home %	-0.24	-0.60 – 0.11	-0.20	-0.59 – 0.19	-0.14	-0.75 – 0.47	0.00	-0.55 – 0.55
Age (avg)	-0.30	-0.75 – 0.16	-0.30	-0.74 – 0.14	-0.04	-0.59 – 0.52	0.14	-0.45 – 0.74
Household size (avg)	-1.77	-7.11 – 3.56	-2.19	-7.87 – 3.49	-3.78	-9.71 – 2.14	-1.81	-8.49 – 4.87
Built environment								
Population density (1000/km²)	-0.32	-0.65 – 0.01	-0.32*	-0.62 – -0.01	0.11	-0.76 – 0.98	0.02	-0.74 – 0.78
Distance to Station (km)	-0.50**	-0.87 – -0.13	-0.57***	-0.88 – -0.26	-1.36***	-1.81 – -0.91	-1.26***	-1.64 – -0.88
Observations	463		463		463		463	
R2 / R2 adjusted	**0.674 / 0.669**		**0.644 / 0.638**		**0.453 / 0.444**		**0.491 / 0.483**	

– The accessibility measure corresponds to the Model name.
* p<0.05 ** p<0.01 *** p<0.001