

SCHOOL TRAVEL IN PEEL REGION

A Report on Trends

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This report is one of six reports examining travel trends in active school travel (AST) across the Greater Toronto and Hamilton Area (GTHA). The GTHA is comprised of the cities of Toronto and Hamilton and the regions of Durham, Halton, Peel, and York. For general trends in AST across the GTHA, refer to School Travel in the GTHA: A Report on Trends.

acknowledgments

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And all the families and households across the GTHA who shared their time and their data with us.

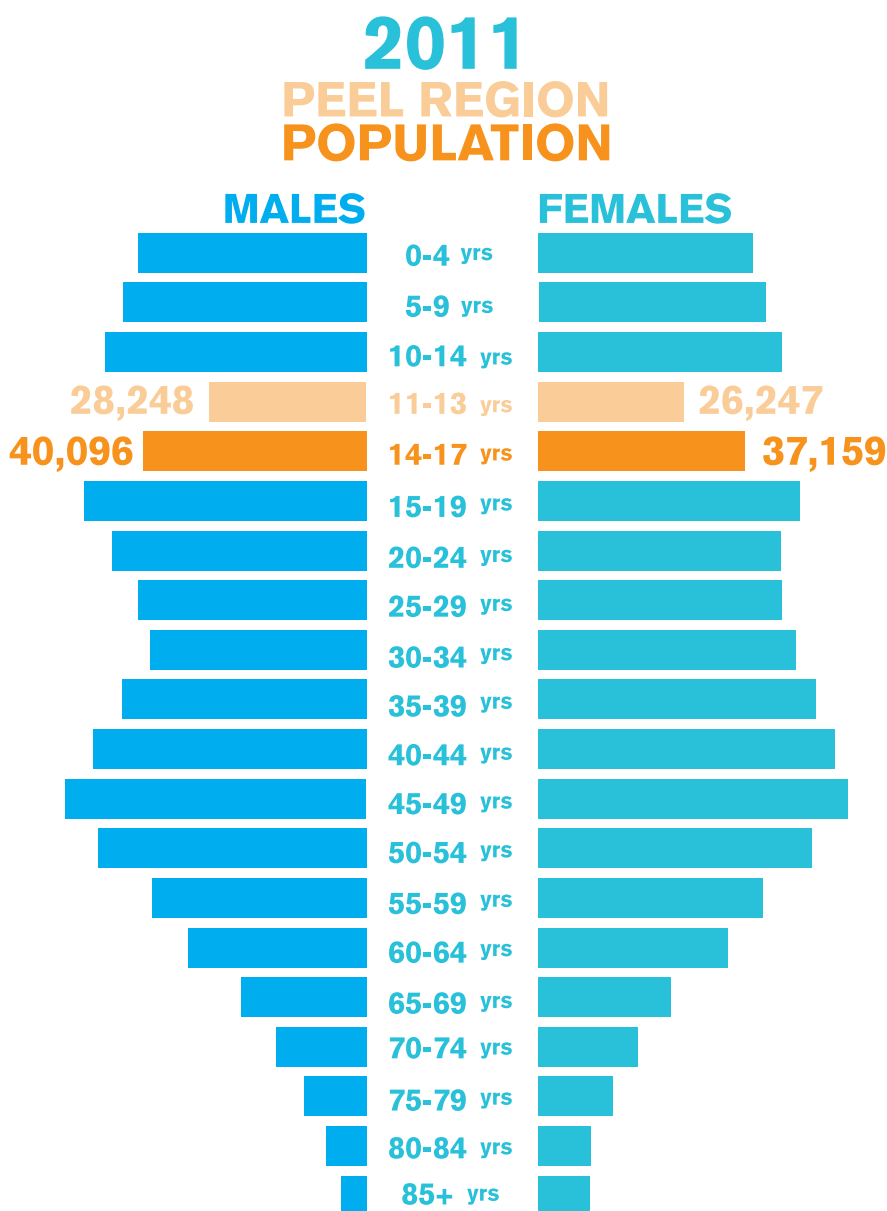
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All regional and GTHA reports from this series can be found at smartcommute.ca



introduction

In recent decades, active school travel (AST), such as walking and cycling to school, has declined in many areas of the Global North including the United States, the UK, and Australia.¹ This trend has similarly been observed in the GTHA², where high levels of traffic congestion and auto-dependence are prevalent. With increasing rates of overweight and obesity and declining levels of walking among children and youth, it is important to understand where and when AST has decreased. This report explores patterns of school travel in the Peel Region by student age, gender, and time of day. Data for this report have been drawn from the 1986 to 2011 versions of the Transportation Tomorrow Survey (TTS).



Metrolinx's Regional Transportation Plan, *The Big Move*, envisions that 60% of children will walk or cycle to school and 20% of adults will use active modes to commute to work by 2031.³ According to the 2011 Census of Canada, Peel has a population of over 310,000 children and youth under the age of 18.⁴ By the end of the 25-year regional planning period, the teenagers of today will be mid-career commuters and their travel decisions will likely be influenced by experiences accumulated during childhood. It is important to establish higher levels of AST in childhood than what is seen today to promote greater levels of walking and cycling now and in the future. An increase in AST in Peel can contribute to meeting regional goals of increased active transportation and contribute toward improving the health and well-being of the children and youth of Peel Region.

travel trends

Local and GTHA School Trips by Mode**

1986 to 2011 | males and females | a.m. and p.m.



AGE

YEAR

WALK

CYCLE

PEEL

GTHA

PEEL

GTHA

..... TO SCHOOL

11 - 13 years

1986

56.1%

55.5%

*

*

1996

46.2%

47.3%

1.3%

1.8%

2001

44.1%

44.7%

1.3%

1.3%

2006

40.6%

42.4%

1.0%

0.8%

2011

35.3%

39.0%

0.9%

1.0%

14 - 17 years

1986

41.0%

36.4%

*

*

1996

32.3%

31.7%

1.2%

1.0%

2001

31.6%

30.9%

1.1%

0.9%

2006

30.0%

30.5%

1.4%

1.1%

2011

29.2%

28.0%

1.0%

1.2%

..... FROM SCHOOL

11 - 13 years

1986

60.3%

57.5%

*

*

1996

50.5%

50.4%

1.4%

1.8%

2001

49.4%

49.2%

1.4%

1.3%

2006

46.8%

49.2%

0.9%

0.8%

2011

43.9%

45.6%

0.9%

1.0%

14 - 17 years

1986

46.3%

40.4%

*

*

1996

40.6%

37.5%

1.3%

1.0%

2001

40.1%

37.8%

1.0%

0.9%

2006

41.6%

39.4%

1.5%

1.2%

2011

39.5%

36.7%

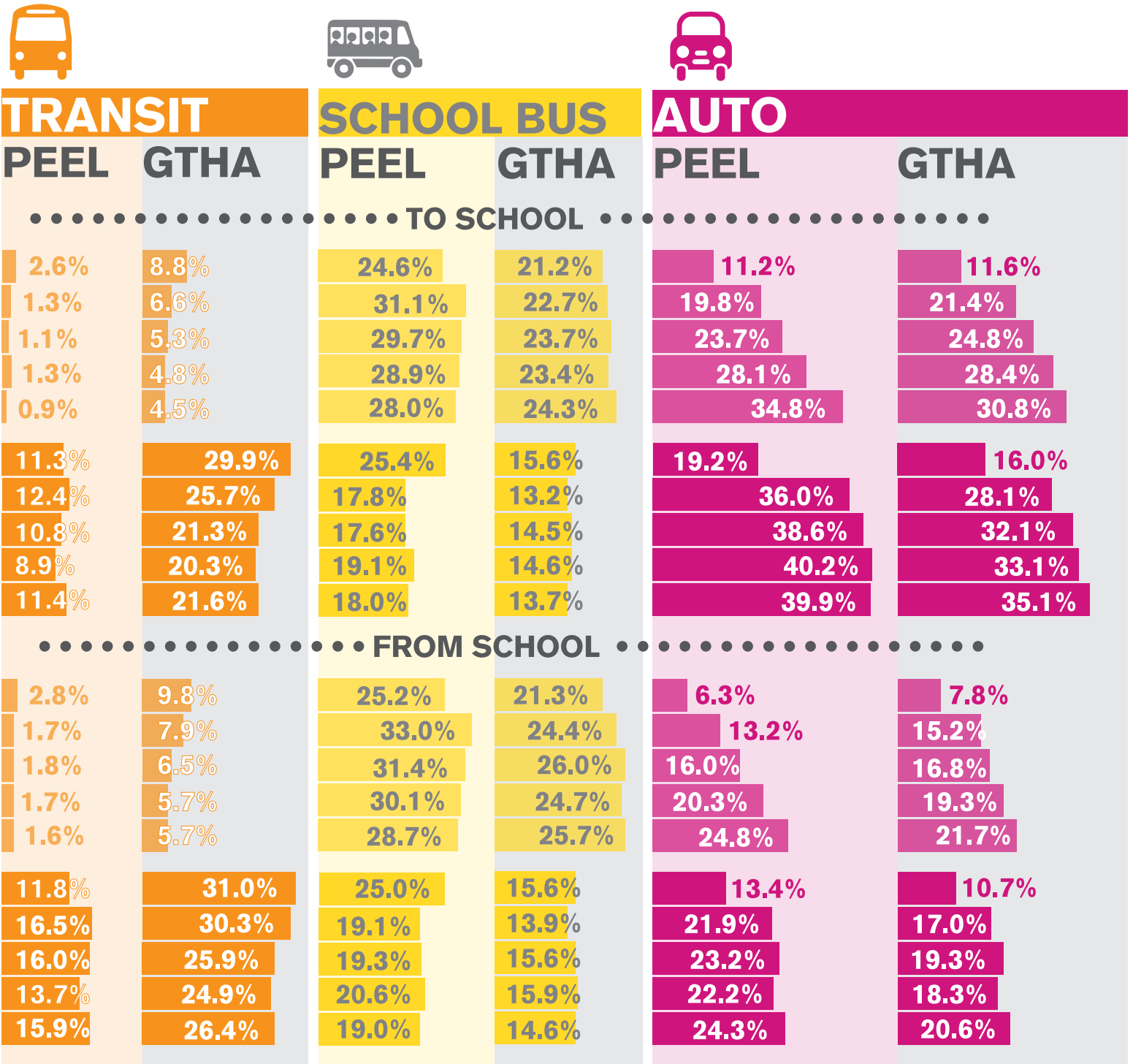
0.9%

1.3%

* The cycling data for 1986 is not statistically reliable

** Due to space considerations, the 'other' category has been omitted from this graph. For all years, the 'other' category ranges between 0 to 1.2% of responses.

Note on age categories: Since the TTS begins collecting data at age 11, throughout this report, 11-13 year olds are used to describe elementary school students and 14-17 year olds are used to refer to secondary school students.

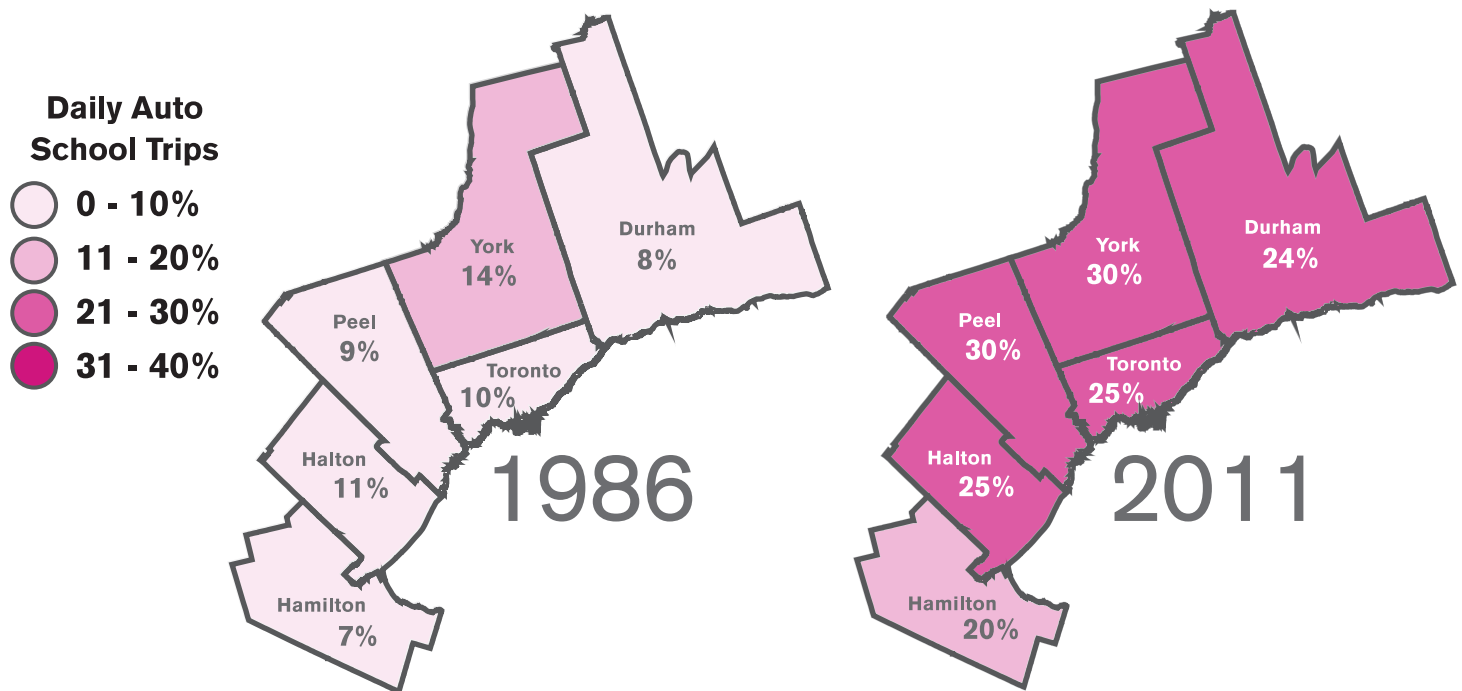


geographic trends

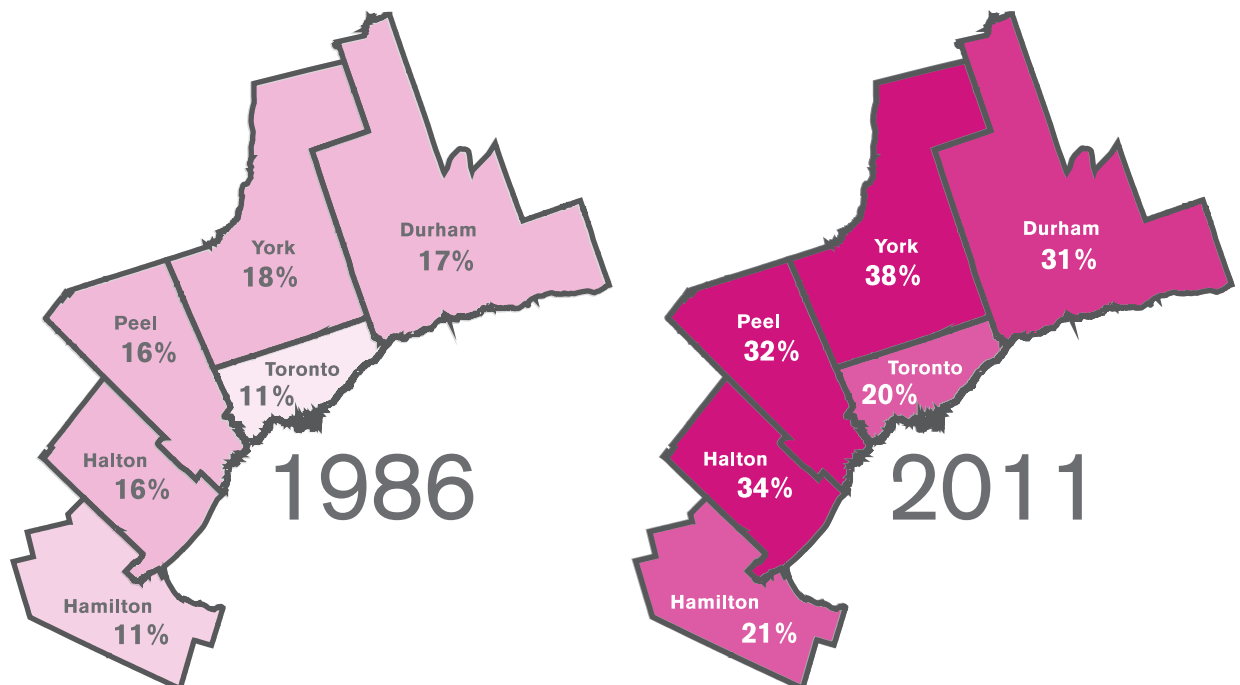
Daily **Auto*** School Trips

1986 and 2011 | males and females | a.m. and p.m.

AGE: 11 - 13 yrs



AGE: 14 - 17 yrs



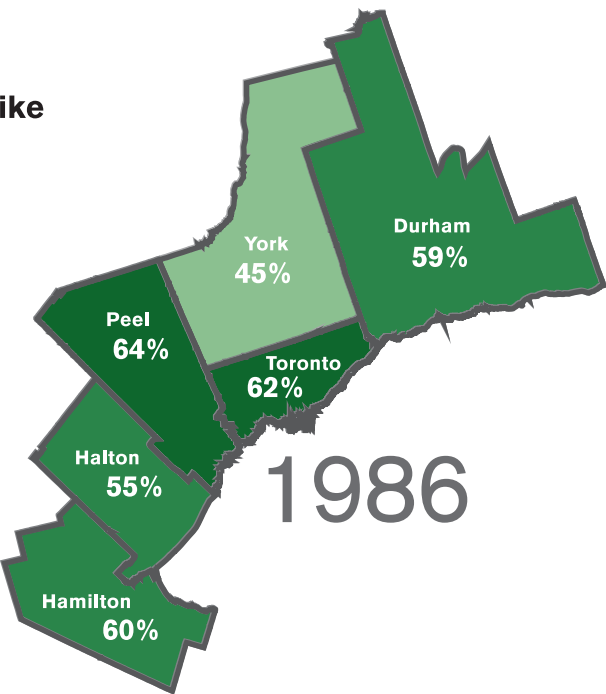
Daily Walking and Biking School Trips

1986 and 2011 | males and females | a.m. and p.m.

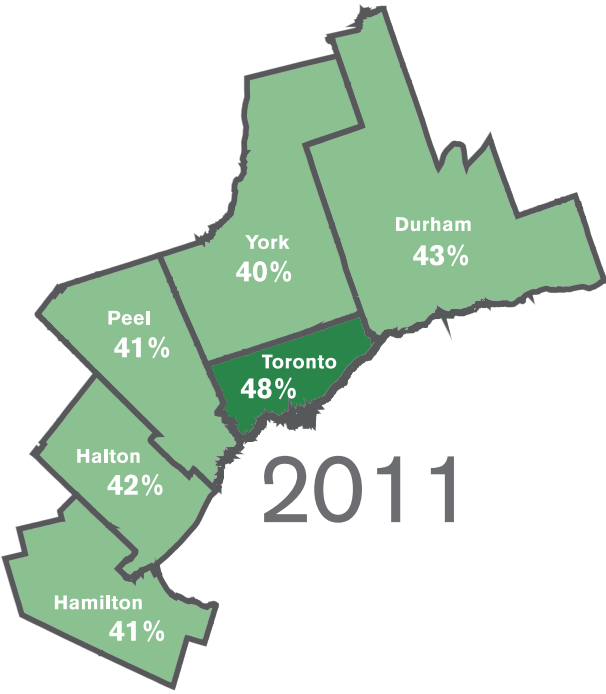
AGE: 11 - 13 yrs

Daily Walk and Bike
School Trips

- 0 - 15%
- 16 - 30%
- 31 - 45%
- 46 - 60%
- 61- 75 %

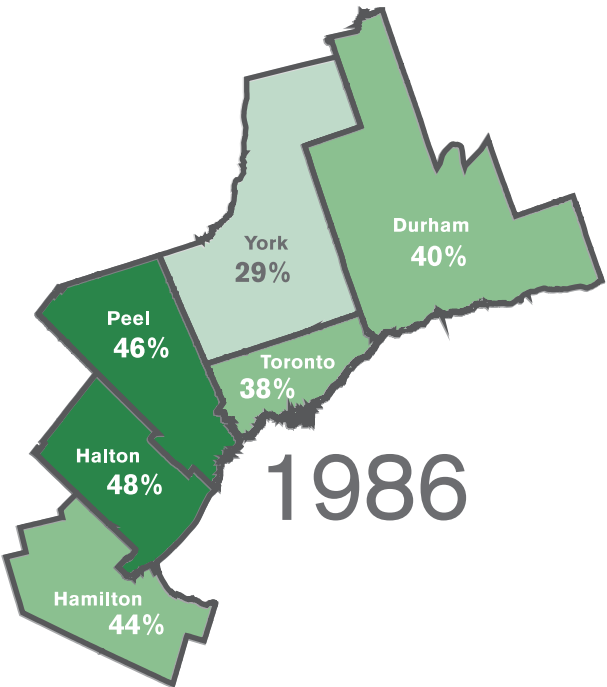


1986

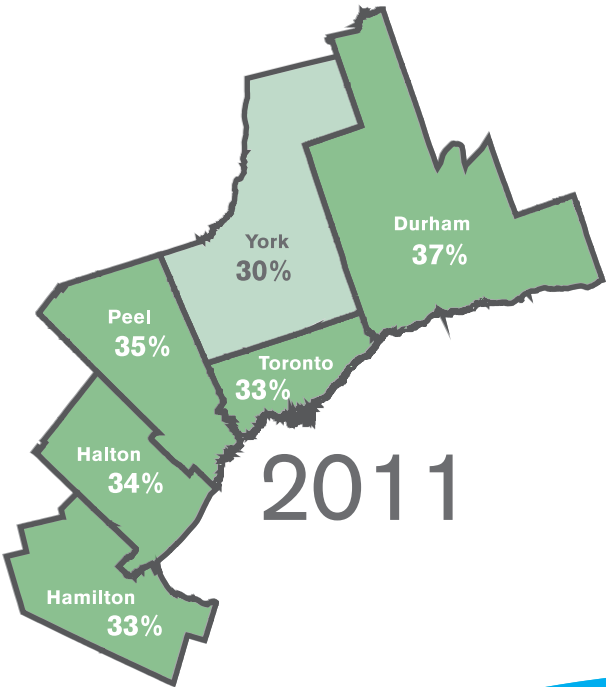


2011

AGE: 14 - 17 yrs



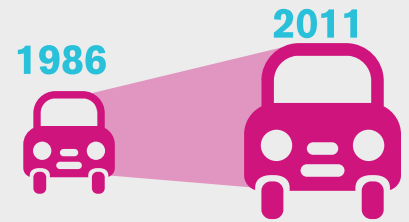
1986



2011

general trends

- As of the 2011 TTS, Peel's auto mode share is larger than the GTHA auto mode share for both age groups, to and from school.
- Levels of AST have declined by 23% for 11-13 year olds and by 11% for 14-17 year olds since 1986.



While there's more driving* among 14-17 year olds,

RATES OF AUTO USE*
AMONG 11-13 YEAR OLDS
HAVE GROWN FASTER

*Auto use and driving refers to students as a driver or a passenger

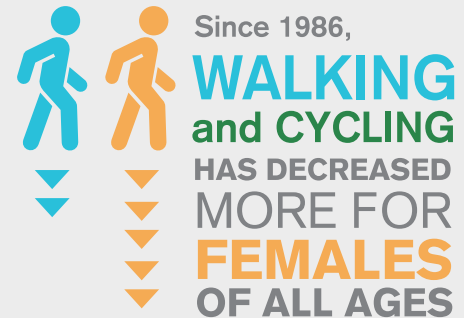
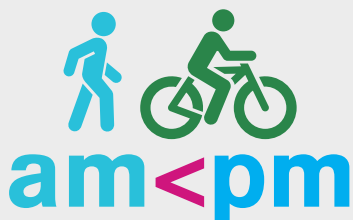


Photo Credit: Shutterstock





Active Transportation use is greater in the afternoon

.....



Busing and transit use is greater in the afternoon

time of day

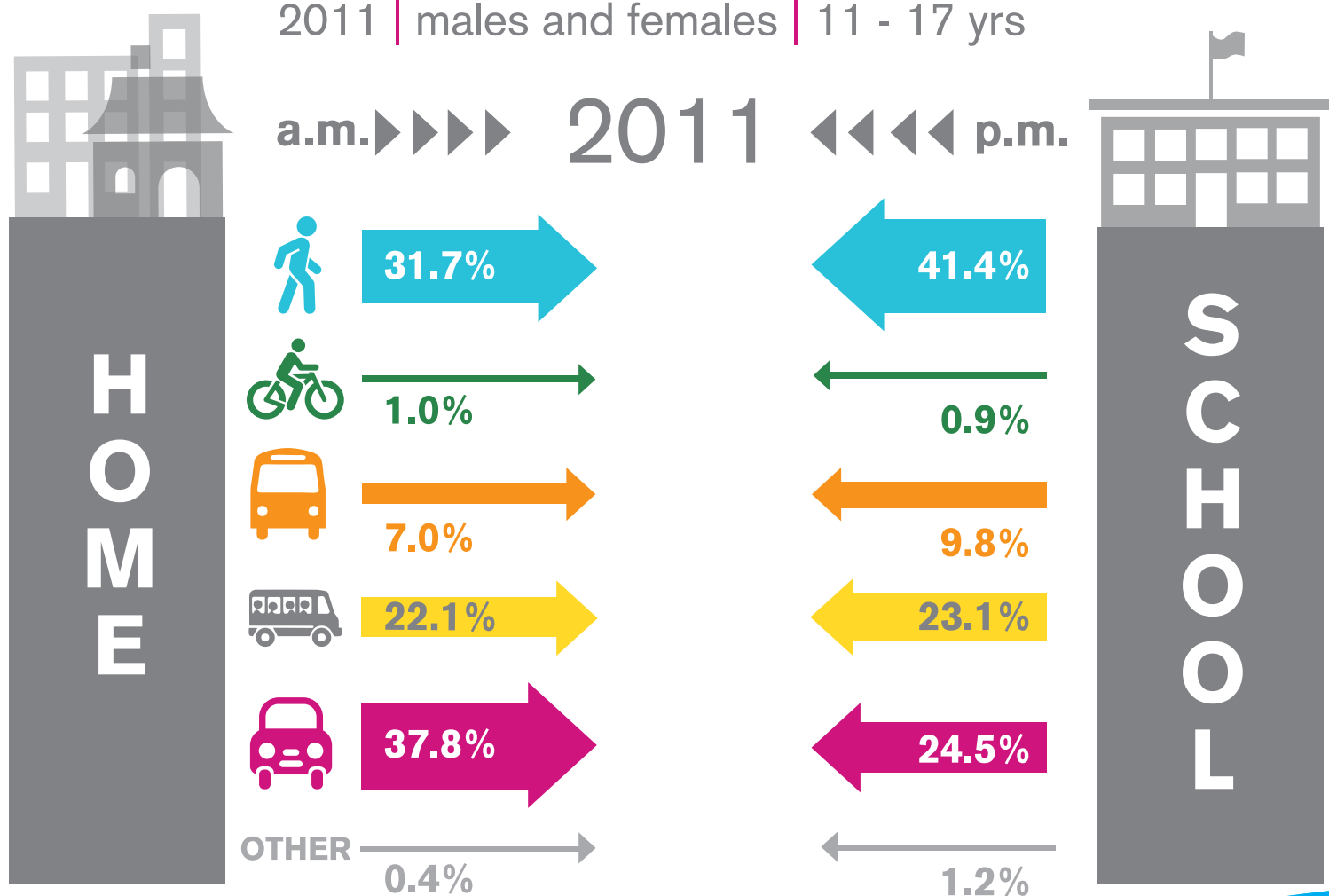
Walking mode share increases by nearly 10% in the afternoon and the automobile mode share decreases by over 13%, indicating that students who take another mode of transportation (e.g. automobile, school bus) in the morning are switching to walking in the afternoon period.

If walking home from school in the afternoon is an option for students, why are they not walking to school in the morning?

Students who use another mode of transportation in the morning and walk in the afternoon represent a key group of children and youth who could potentially make an easy switch to walking in the morning. More walking could ease traffic problems around schools in the morning and afternoon.

School Trips by Mode and Time of Day

2011 | males and females | 11 - 17 yrs



gender

Travel Mode* Shares 2011 | a.m. and p.m.

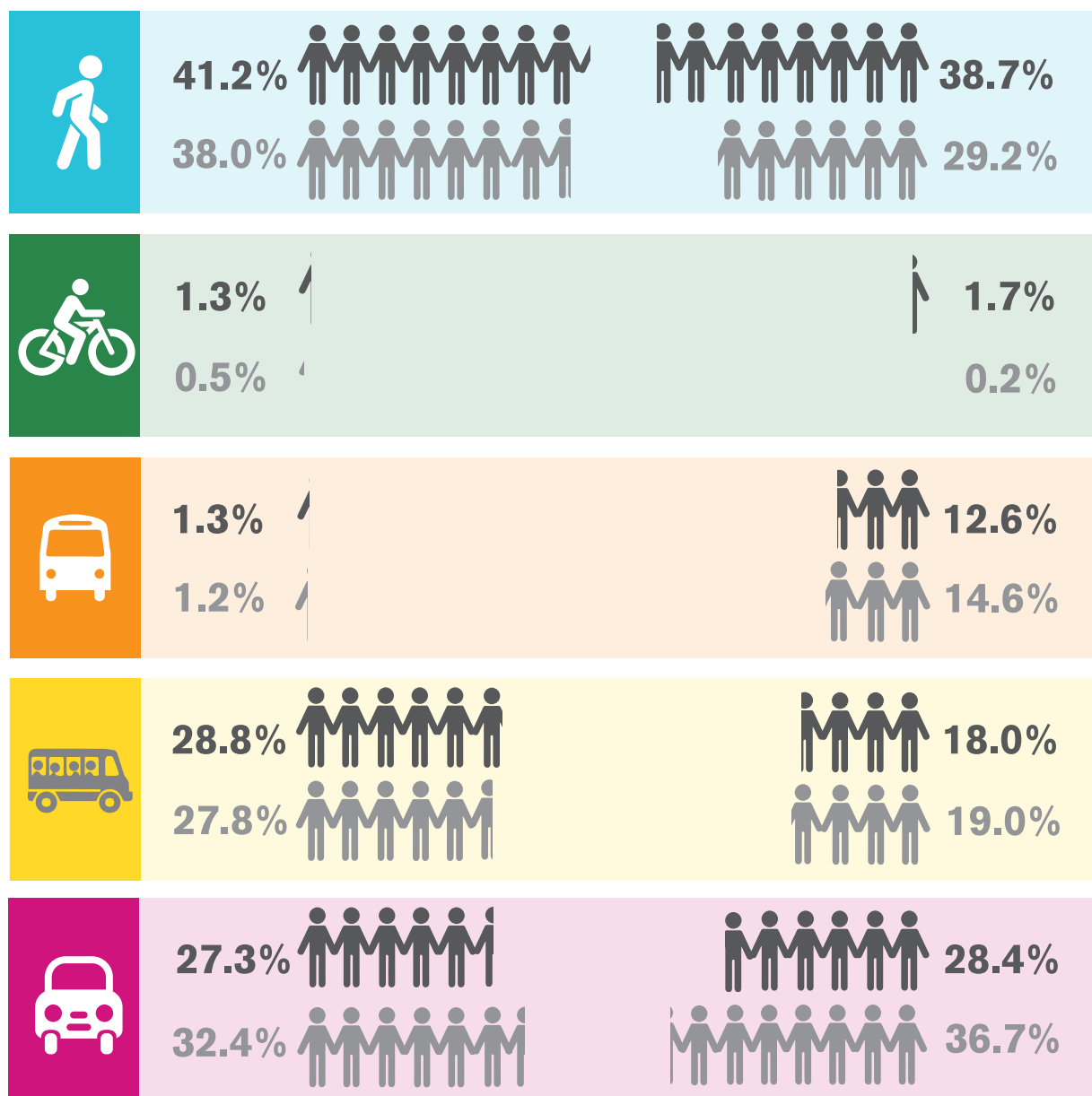
Note on gender: Gender was categorized by male or female as self-reported by the individual or by the member of the household who completed the survey on behalf of the household. The gender recorded may therefore not reflect the gender that the child identifies with.

♂ = MALES
♀ = FEMALES
ONE ♂ = 5%

AGE:
11 - 13 yrs

2011

AGE:
14 - 17 yrs



* Due to space considerations, the 'other' category has been omitted from this graph. For 2011, the 'other' category ranges between 0.0 to 0.6% of responses.



ACTIVE SCHOOL TRANSPORTATION USE
DECLINES FOR MALES AND FEMALES
AS THEY GET OLDER



MALES ARE
MORE LIKELY TO USE
ACTIVE SCHOOL TRAVEL
THAN FEMALES AT ALL AGES

conclusions

- Between 1986 and 2011, walking mode share in Peel Region has declined for 11-13 and 14-17 year olds (both to and from school), but walking occurs more in the afternoon than the morning.
- Automobile use is increasing over time and is greater for girls than boys, particularly in the morning period.
- The decline in AST in Peel Region has implications for the health of children as the risk of overweight, obesity and vehicle occupant and pedestrian injury increases with automobile use.
- Differences in age, gender, identity, mobilities, and abilities must be considered when thinking about and planning for school transportation.

references

- ¹ Sirard, J. R. and Slater, M.E. (2008) Walking and Bicycling to School: A Review. *American Journal of Lifestyle Medicine*, 2(5), 372-396.
- ² Buliung, R. N., Mitra, R., and Faulkner, G. (2009) Active school transportation in the Greater Toronto Area, Canada: An exploration of trends in space and time (1986-2006). *Preventive Medicine*, 48, 507-512.
- ³ Metrolinx (2008) *The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area*. Greater Toronto Transportation Authority.
- ⁴ Statistics Canada (2011) *Age and Sex for the Population of Canada, Provinces, Territories, Census Divisions, Census Subdivisions and Dissemination Areas, 2011 Census*. Statistics Canada: Ottawa.



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