Appendix E: Diabetes Research - Selected Exhibits from the 2007 ICES Study

Exhibit 5.8   Average number of daily bicycle trips per person by neighbourhood of residence, and bicycle routes, in Toronto, 2001

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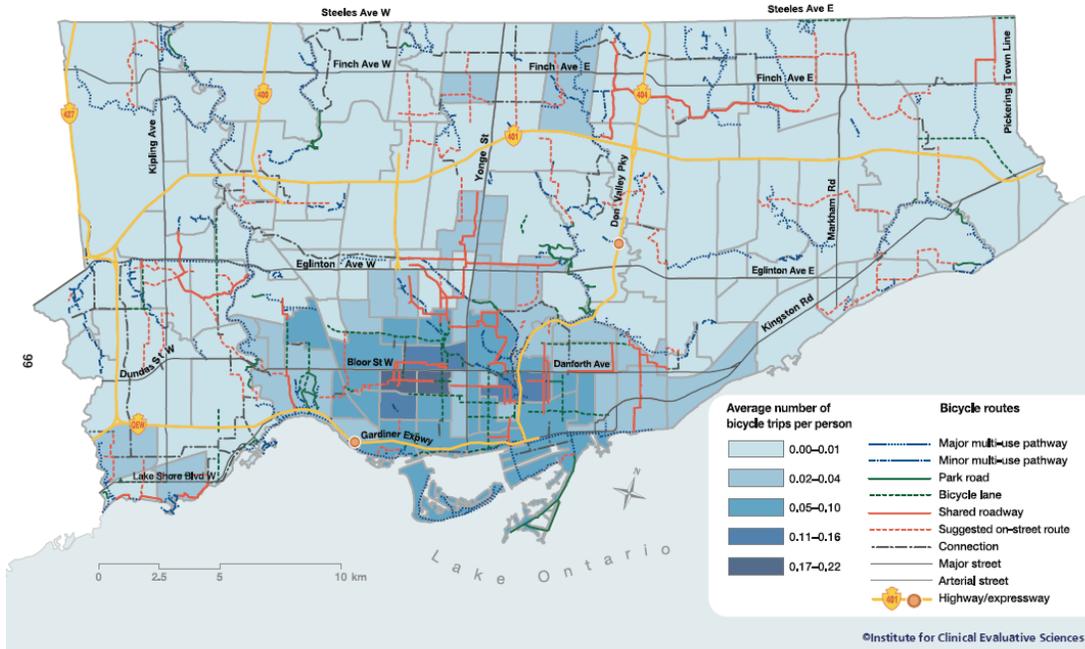
▼ **Findings**

- In 2001, residents in the downtown core of Toronto had the highest number of daily bicycle trips, corresponding to the area with the most bicycle lanes.

- Other areas with high numbers of daily bicycle trips corresponded to the presence of multi-use pathways.

Exhibit 5.11   Average number of daily public transit trips per person, by neighbourhood of residence, in Toronto, 2001

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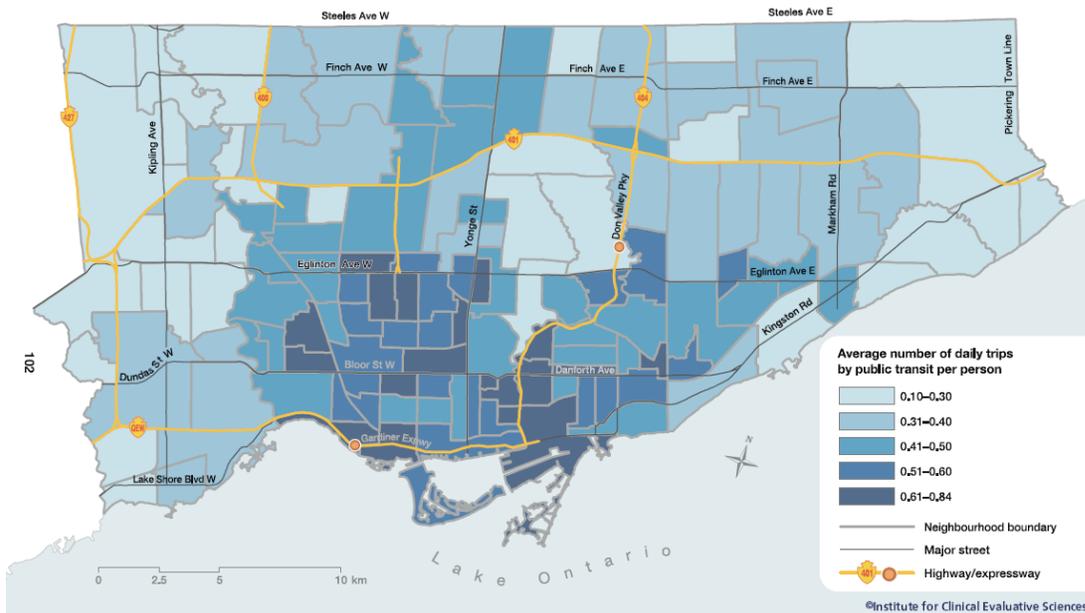
▼ **Findings**

- In 2001, the number of daily transit trips was highest among residents in a large area of south central Toronto, with some extension into northern areas. Higher transit use was found among residents in the low-income, doughnut-shaped area surrounding central Toronto (Chapter 3).

- Residents living in parts of central Toronto, along with those from areas in the far west and far east of the city, had the lowest number of daily transit trips. Residents in these areas had relatively high income levels (see Chapter 3).

- There was approximately an eight-fold variation among neighbourhoods of residence in the number of transit trips per day.

Exhibit 5.15 Spatial relationship between dwellings built before 1946 (high or low) and daily walking or bicycling trips per person (high or low), by neighbourhood, in Toronto, 2001


Legend:

% of dwellings built before 1946		Daily walking or bicycling trips per person
Low %	and	Low
Low %	and	High
High %	and	High
High %	and	Low
Relationship not statistically significant		

— Neighbourhood boundary
— Major street
— Highway/expressway

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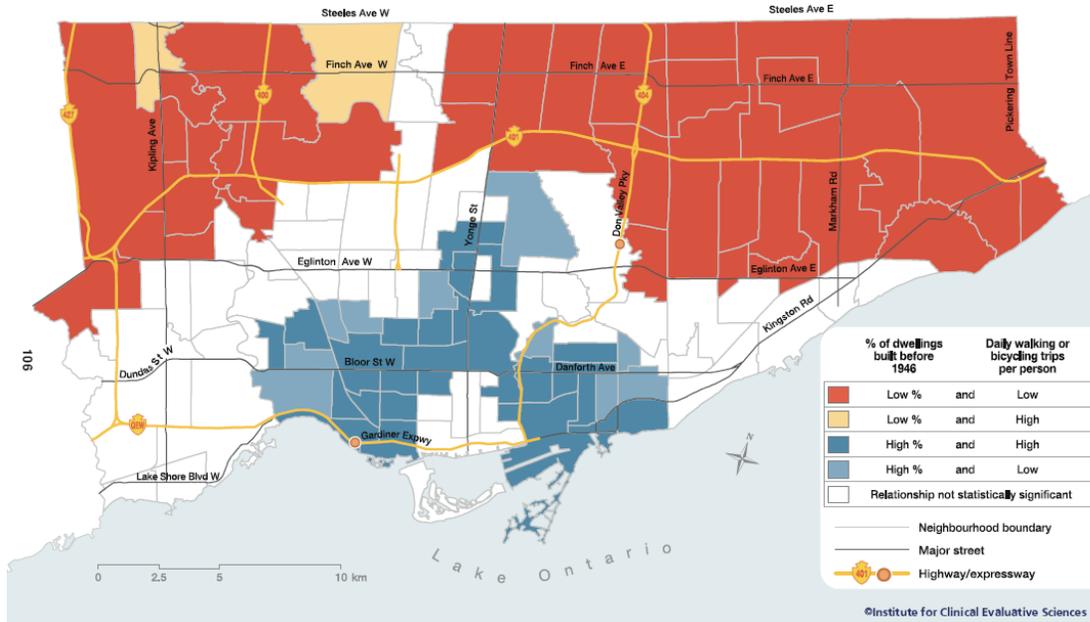
▼ **Findings**

• In 2001, in a large band of neighbourhoods across northern portions of the city, there were relatively low rates of walking or bicycling trips per person.

• In contrast, south central Toronto had higher rates of walking or bicyding trips and a higher proportion of dwellings built before 1946.

Exhibit 5.18 Spatial relationship between average number of daily public transit trips per person (high or low) and average annual household income (high or low), by neighbourhood, in Toronto, 2001


Legend:

% of daily trips by public transit		Average annual household income
Low %	and	Low
Low %	and	High
High %	and	High
High %	and	Low
Relationship not statistically significant		

— Neighbourhood boundary
— Major street
— Highway/expressway

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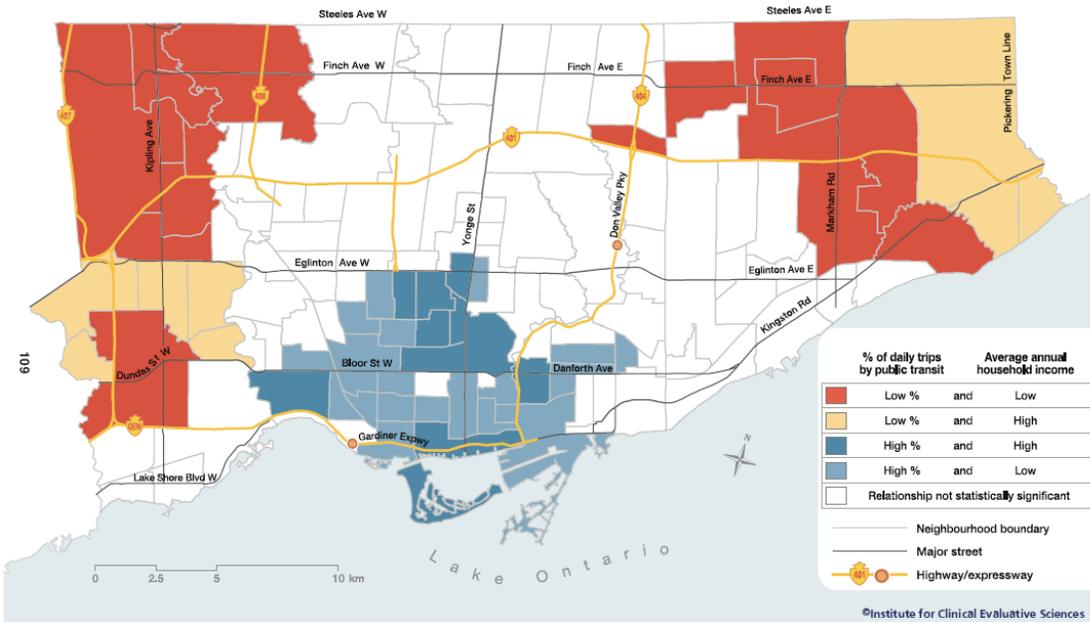
▼ **Findings**

• In 2001, the far eastern and far western areas of Toronto had a relatively low number of daily public transit trips in areas that had both high and low average annual household income.

• South central Toronto had a relatively high number of daily public transit trips in areas that had both high and low household income.

Exhibit 5.21 Spatial relationship between age- and sex-adjusted diabetes prevalence rates [2001/02] (high or low) and average number of daily walking or bicycling trips per person [2001] (high or low), by neighbourhood of residence, in Toronto


Diabetes rates		Number of daily walking or bicycling trips per person
High	and	Low
High	and	High
Low	and	High
Low	and	Low
Relationship not statistically significant		

Neighbourhood boundary
Major street
Highway/expressway

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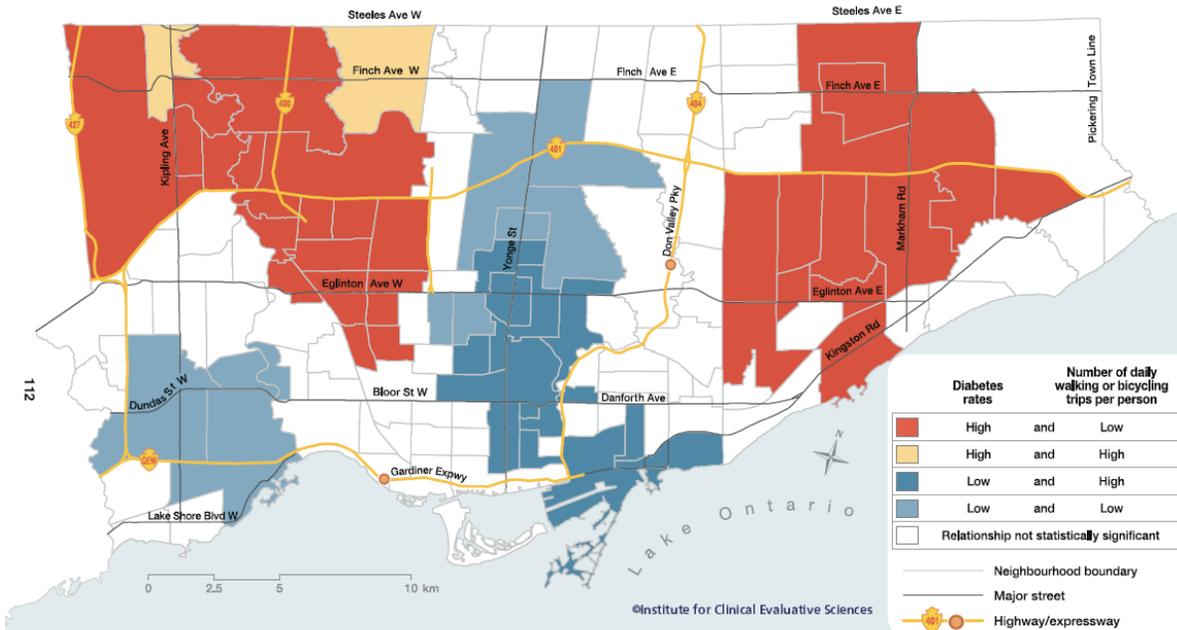
▼ **Findings**

• In 2001, residents living in large areas in the northwest and east of Toronto with high diabetes rates had a relatively low number of daily walking or bicycling trips.

• South central Toronto had low diabetes rates and a relatively high number of daily walking or bicycling trips.

Exhibit 5.22 Spatial relationship between age- and sex-adjusted diabetes prevalence rates [2001/02] (high or low) and average number of daily public transit trips per person [2001] (high or low), by neighbourhood of residence, in Toronto


Diabetes rates		Number of daily public transit trips per person
High	and	Low
High	and	High
Low	and	High
Low	and	Low
Relationship not statistically significant		

Neighbourhood boundary
Major street
Highway/expressway

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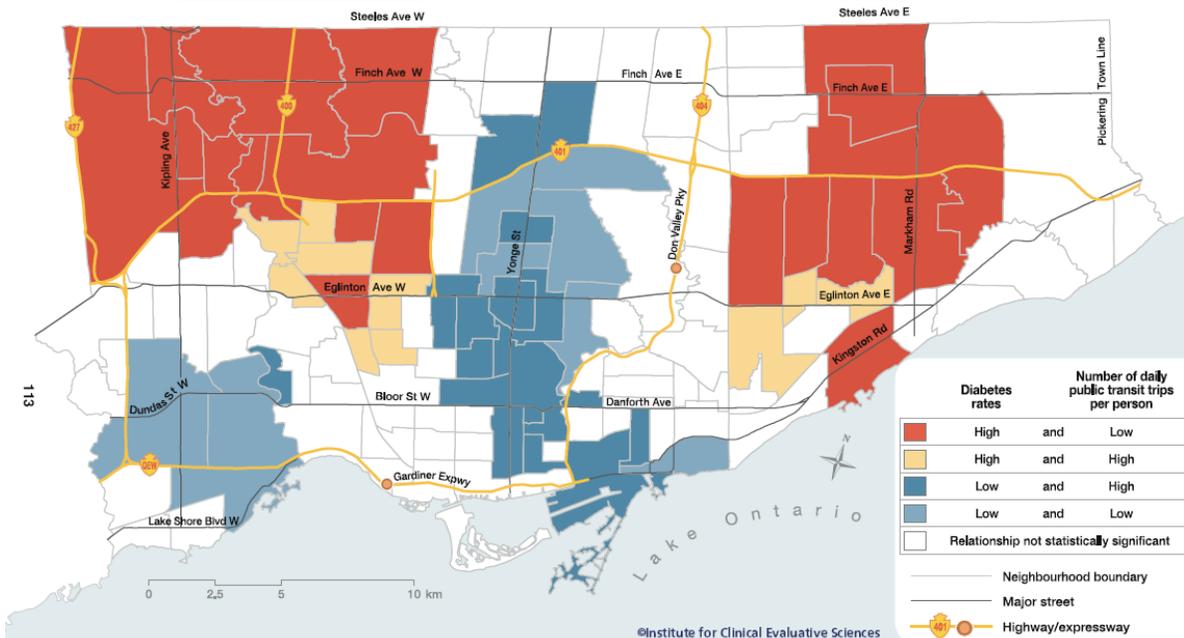
▼ **Findings**

• The pattern for daily public transit trips in 2001 is very similar to that found for walking or bicycling trips (Exhibit 5.21).

Exhibit 6.5   Average number of vehicles per household, by neighbourhood, in Toronto, 2001

Average number of vehicles per household

☐	0.5–0.7
☐	0.8–0.9
☐	1.0–1.1
☐	1.2–1.3
☐	1.4–1.6

Neighbourhood boundary
Major street
Highway/expressway

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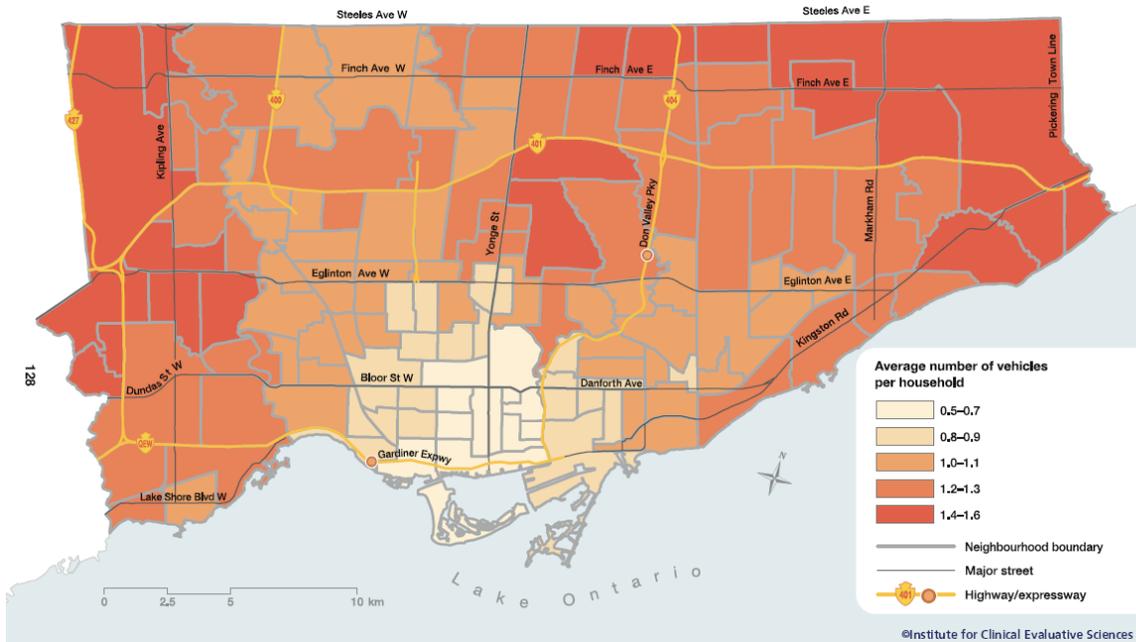
▼ **Findings**

• In 2001, people living in Toronto's downtown core and its surrounding areas were less likely to own cars.

• Car ownership rates were highest among residents in the outer regions of the city, particularly in the northwest and northeast, and also among those living in centrally-located, wealthier neighbourhoods.

Exhibit 6.19   **Correlation between the Activity-Friendly Index (AFI) and its elements [2001–2004], and neighbourhood rates of walking/bicycling [2001], and diabetes prevalence rates [2001/02], in Toronto**

	Spearman Rank Correlation with Diabetes Rates	Spearman Rank Correlation with Mean Number of Walking/Bicycling Trips per Person
Population per square kilometre (sq km) of residential area	0.053	0.607**
Car ownership	0.205	-0.604**
All retail services per 10,000 population	-0.192	0.461**
Average distance from residential points to the nearest five retail services	0.141	-0.604**
Crime rate per 100,000 population	0.270*	0.353**
Activity Friendly Index¥	**-0.235***	**0.597****

*   P-value <0.01

** P-value <0.001

¥   AFI is composed of: population per sq km of residential area; cars per household; retail services per 10,000 population; average distance to nearest five retail services; and crime rate per 100,000 population.