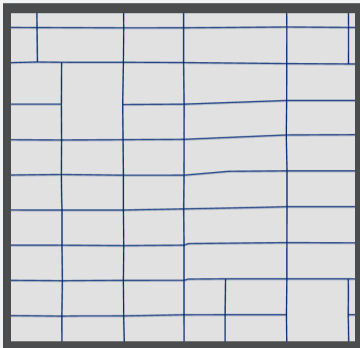


Neighbourhood Design & Physical Activity

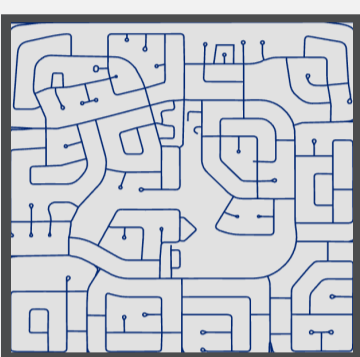
In a recent Canadian study*, levels of transportation and leisure physical activity among *grid* and *warped-grid* neighbourhood residents were compared to *curvilinear* neighbourhood residents...

Grid Design



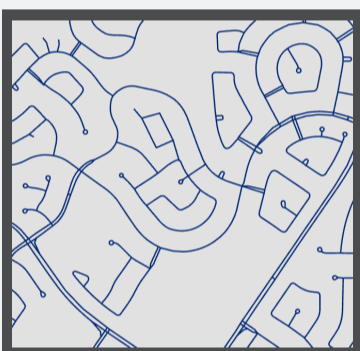
- High levels of pedestrian connectivity
- Mix of land uses
- Treed boulevards
- Sidewalks on both sides of the street
- *High walkability*

Warped-Grid Design



- Crescent street patterns/curved roads
- Moderate pedestrian connectivity
- Sidewalks directly adjacent to roads
- *Medium walkability*

Curvilinear Design



- Strip of auto-oriented commercial land
- High volume collector roads
- "Loops and Lollipops" street pattern
- Low pedestrian connectivity
- Sidewalks missing from some streets
- *Low walkability*

Grid residents experienced significantly higher levels of participation in...

Warped-grid residents experienced higher levels of participation in...



Transportation walking



Leisure cycling



Transportation cycling



Transportation cycling



Vigorous-intensity leisure physical activity



Vigorous-intensity leisure physical activity

No neighbourhood differences in time spent in transportation or leisure physical activity were found.

Neighbourhood design may encourage transportation and leisure physical activity in Canadian adults.

*For more information:

McCormack GR, Koohsari MJ, Oka K, Friedenreich CM, Blackstaffe A, Alaniz FU, Farkas B. Differences in transportation and leisure physical activity by neighbourhood design controlling for residential choice. *Journal of Sport and Health Science*. 2019. doi: <https://doi.org/10.1016/j.jshs.2019.05.004>

References:

1. Sandalack BA, Alaniz Uribe FG, Eshghzadeh Zanjani A, Shiell A, McCormack GR, Doyle-Baker PK. Neighbourhood type and walked size. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*. 2013 Nov 1;6(3):236-55.



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