

NEWPATH

Nutrition, Environment in Waterloo Region, Physical Activity,
Transportation & Health





NEWPATH *The Research Team*



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University of Waterloo



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Centre for Behavioural Research
And Program Evaluation (CBRPE)



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Region of Waterloo

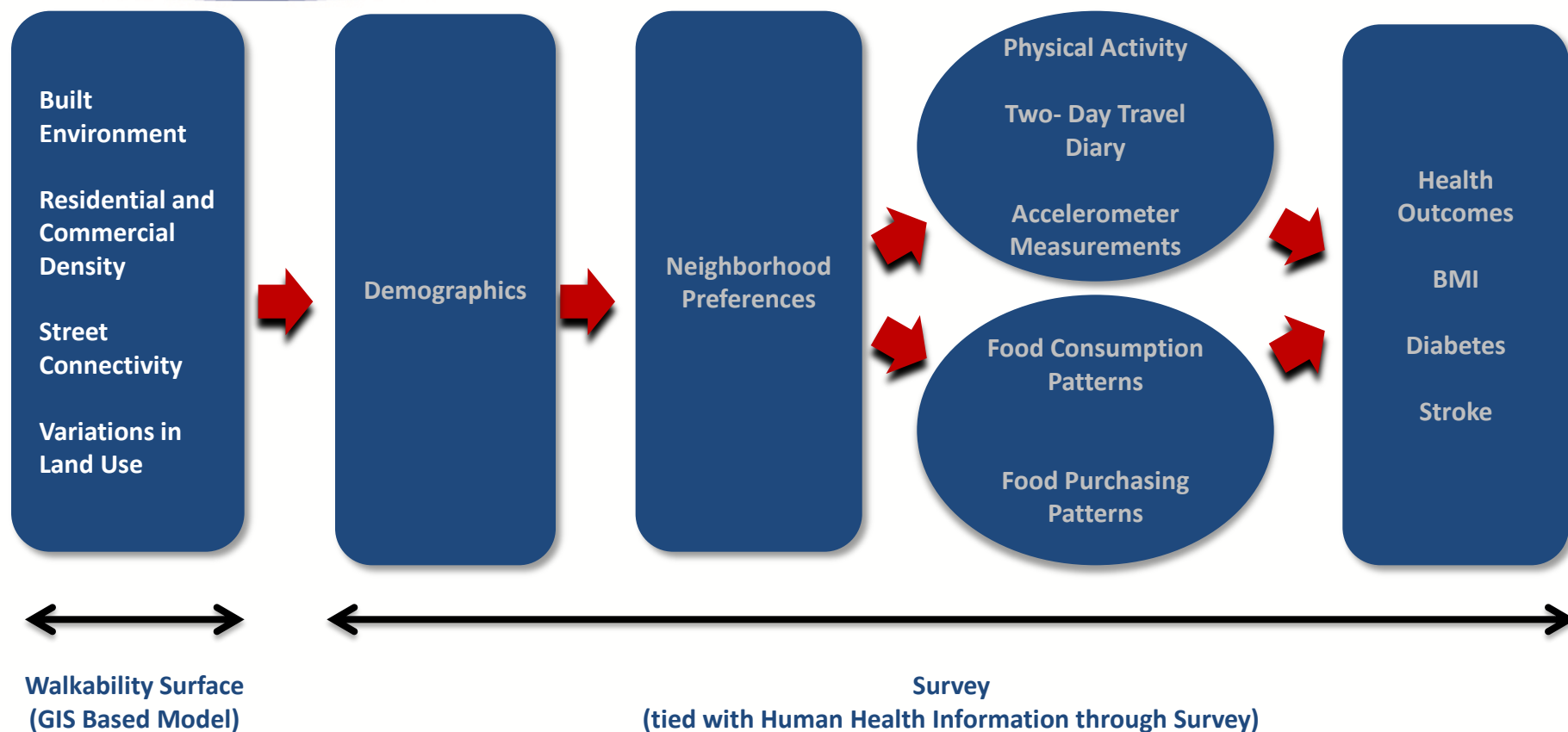
GIS Development

- Margaret Parkin, Region of Waterloo
- Rehan Waheed, Region of Waterloo

Research Associates

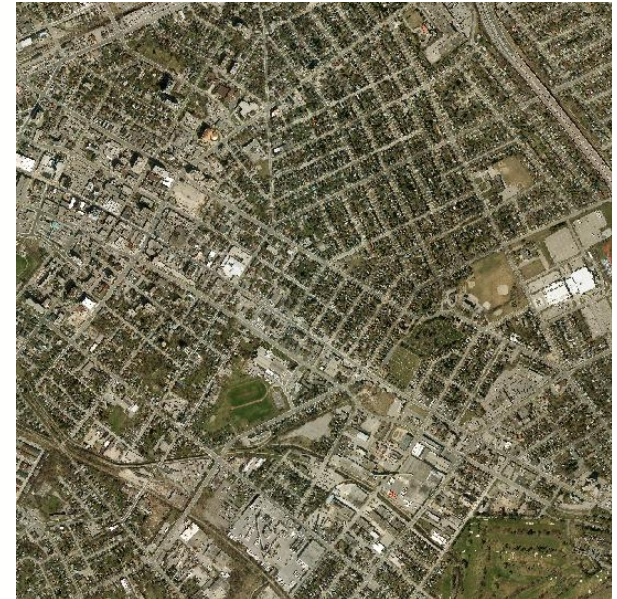
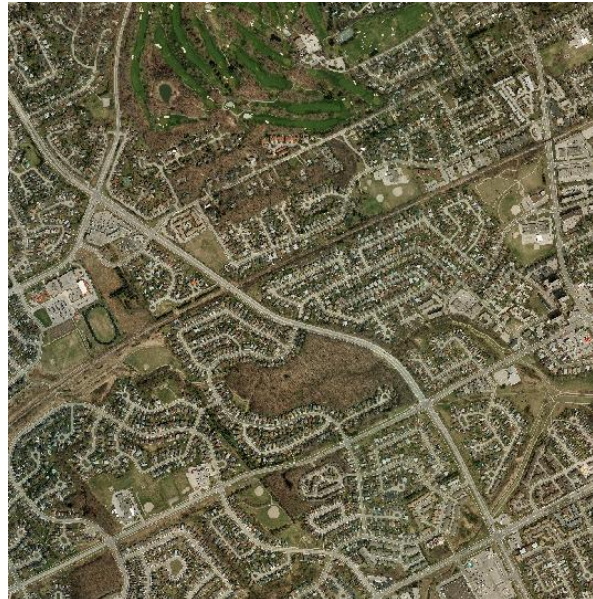
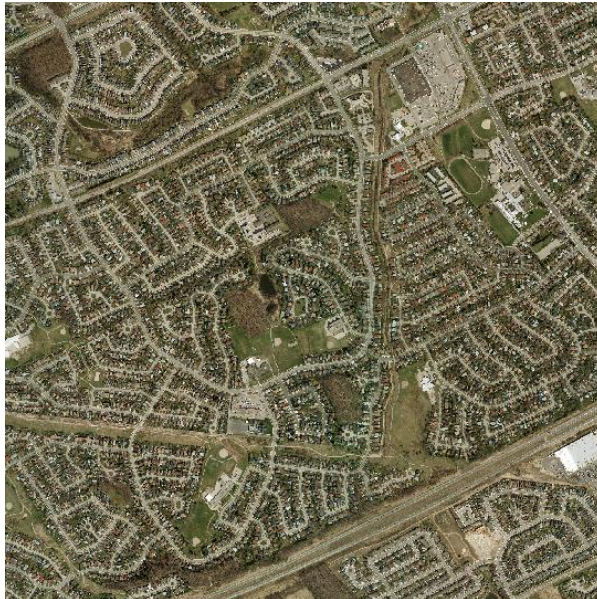
- Dr. Leia Minaker, University of Waterloo
- Josh van Loon, University of British Columbia

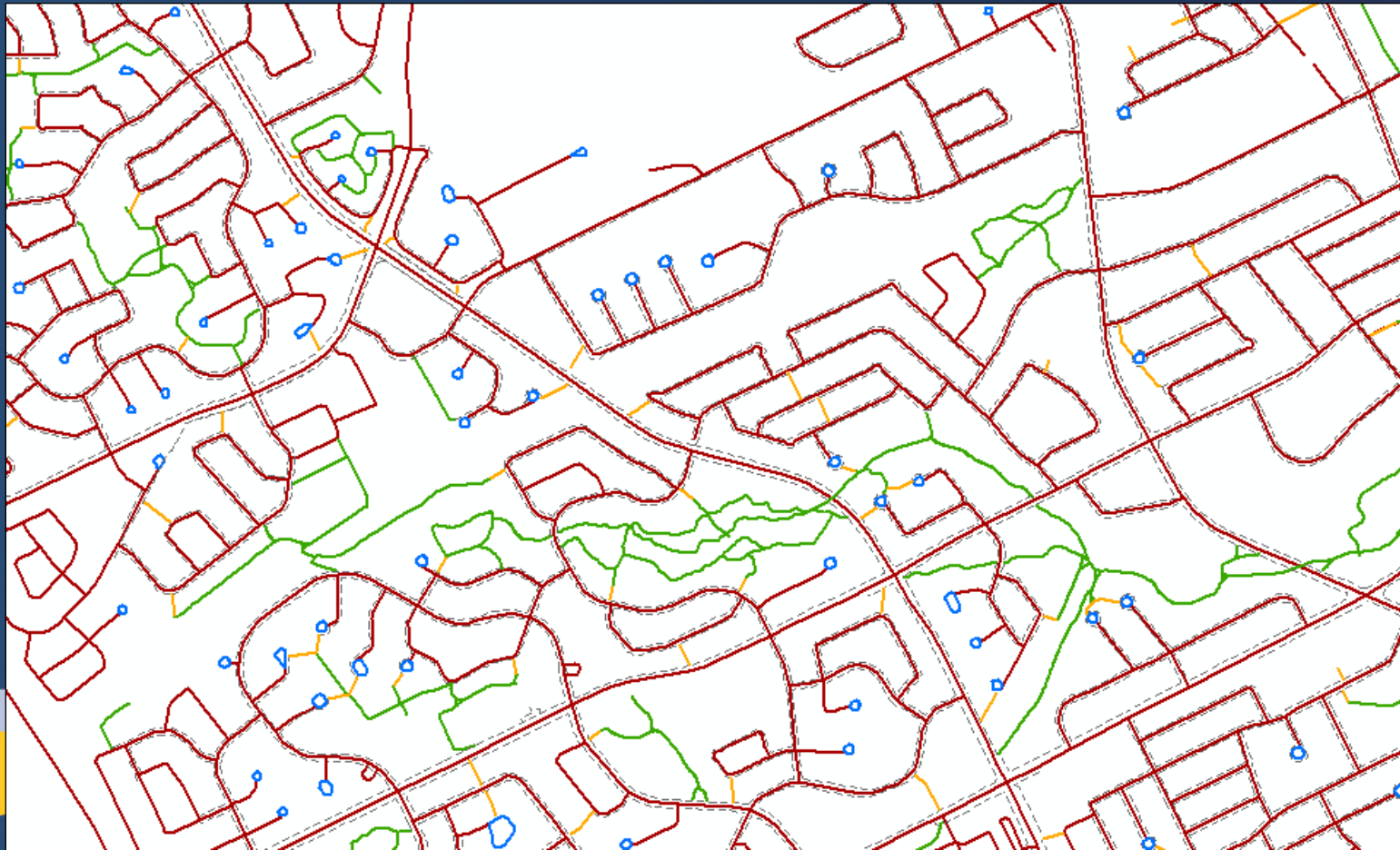
Elements of the Study



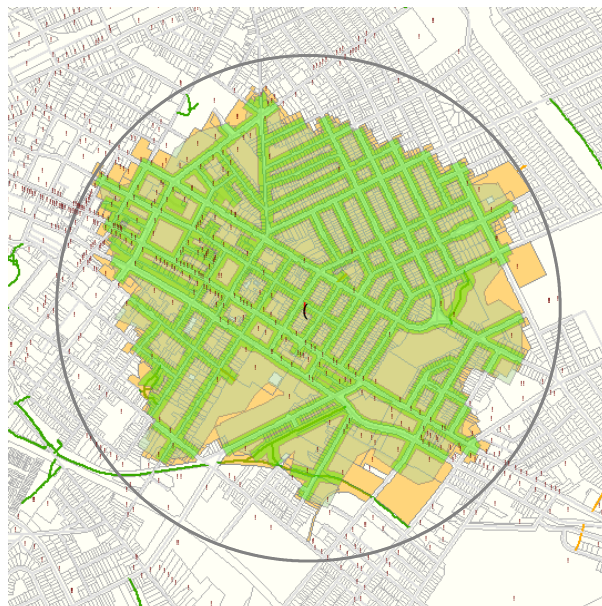
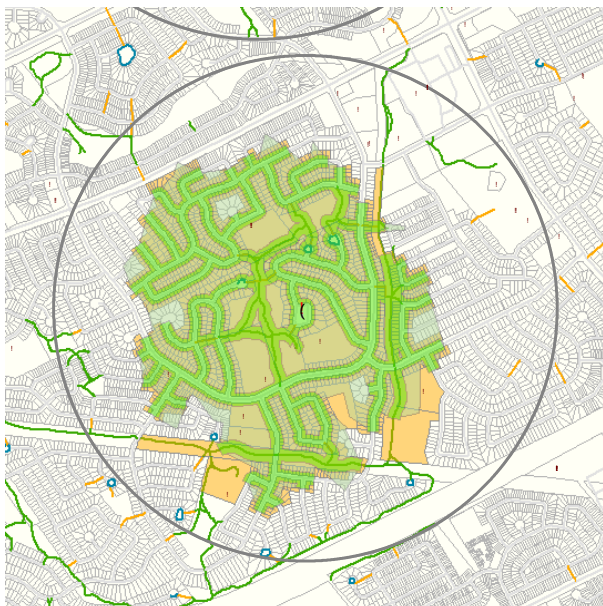
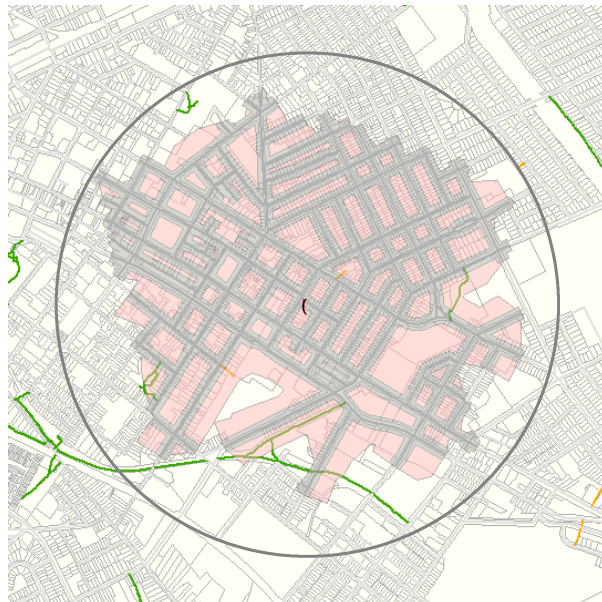
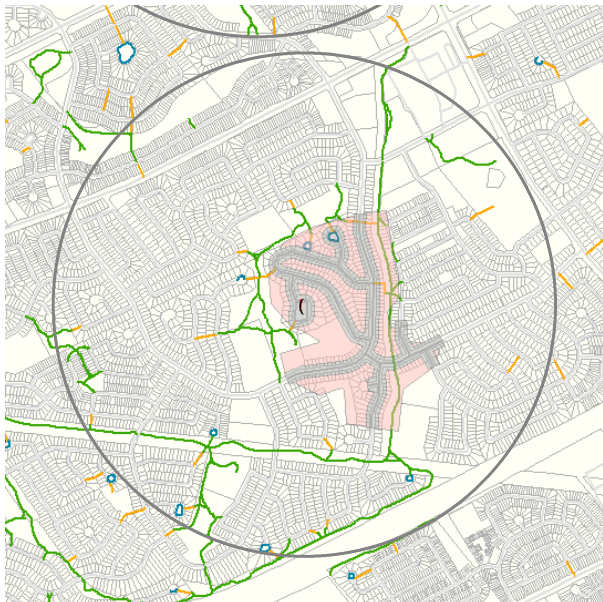
WALKABILITY INDEX

WHERE CAN PEOPLE WALK?

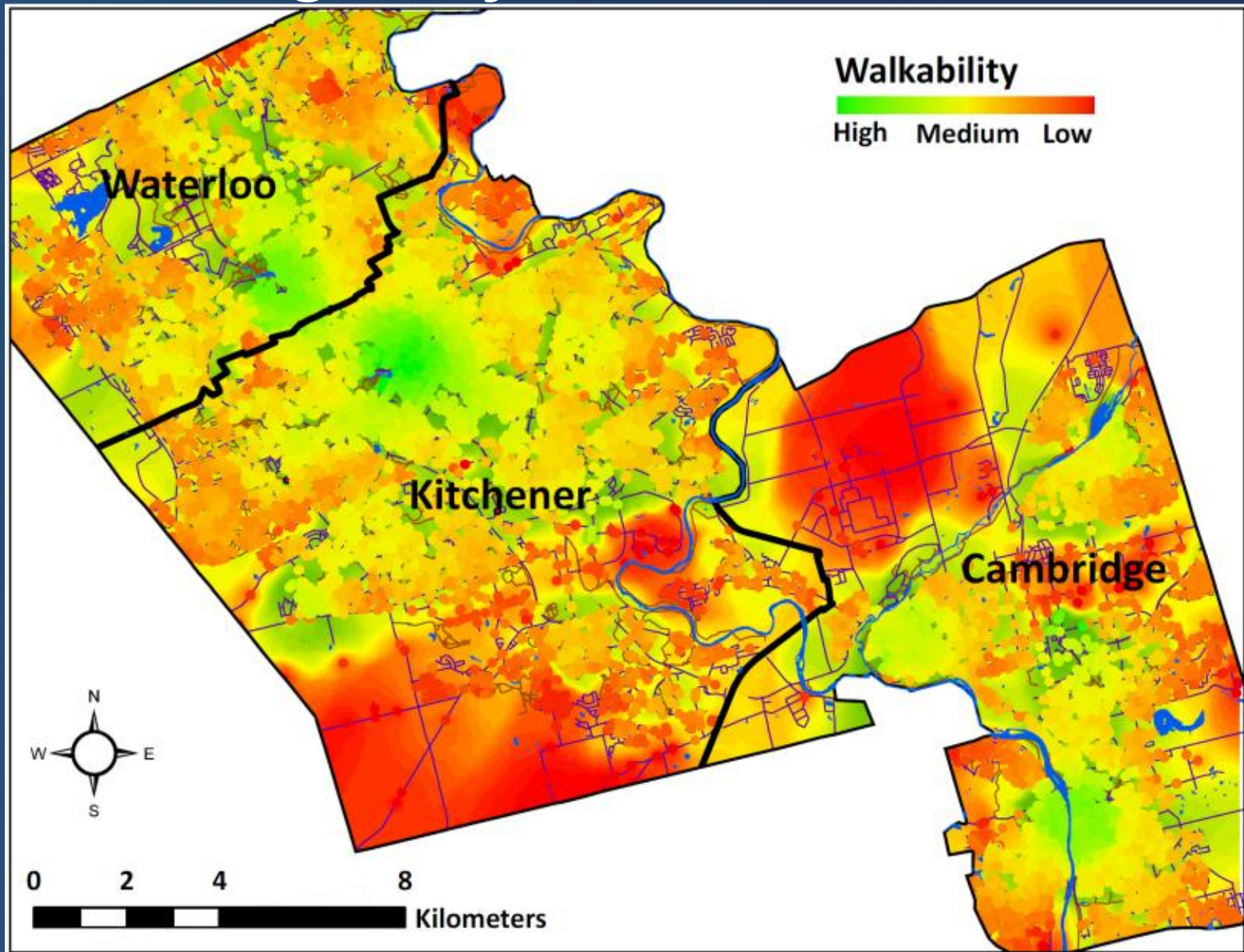




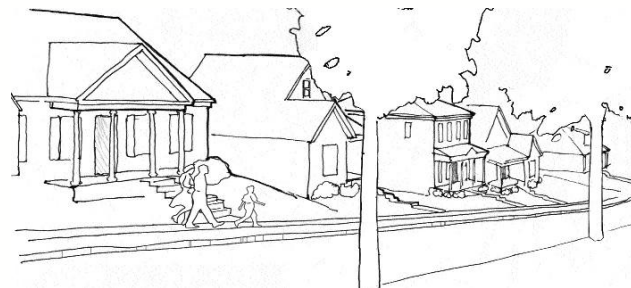
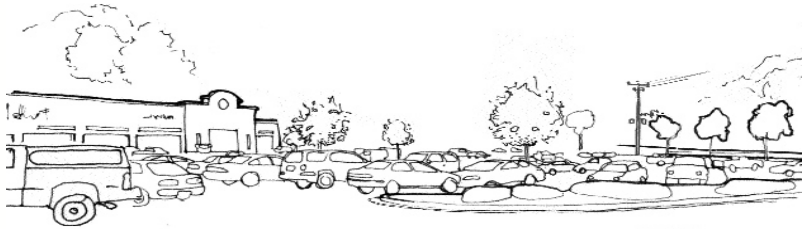
- Walkways in orange



Walkability Surface for Region of Waterloo



Neighborhood Preferences





Neighborhood Preference

- ✓ **More space for walking and biking**
- ✓ **Close to a variety of shops and services**
- ✓ **Easy to walk or cycle to at least some destinations**
- ✓ **Shorter commute to work**

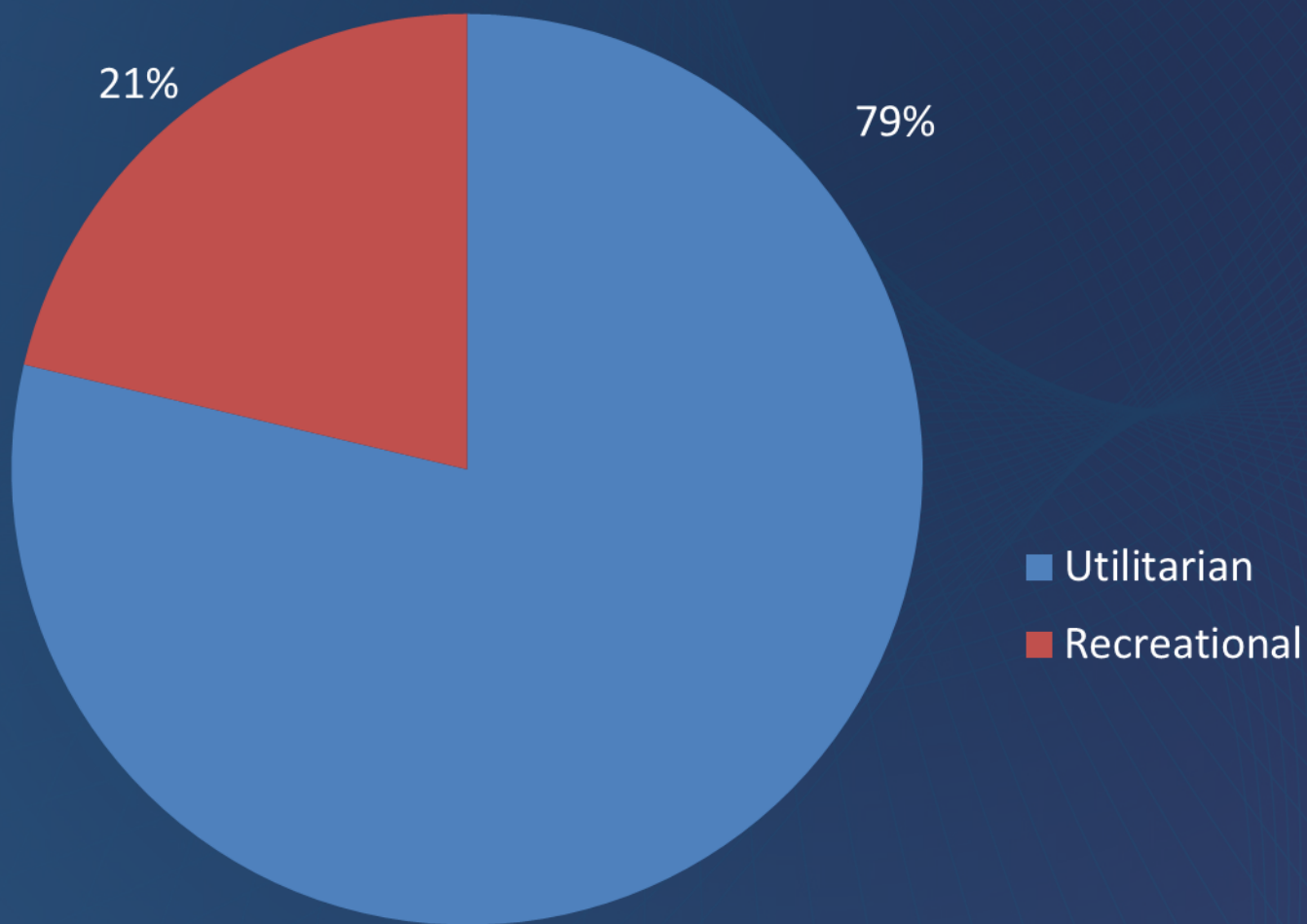


Importance of neighborhood features

Rank	Overall Sample	Planning to move
1	Low Crime rates	Ease of Walking
2	Near Shops & Services	Low Crime
3	Ease of walking	Near Transit
4	Near major roads & highways	Closeness to job
5	Closeness to job	Quality of Schools

TRAVEL PATTERNS

Travel Behaviour



*n=36,498 total trips



Travel Attitudes by Age

	18-24	25-44	45-64	65+
Prefer to take transit	49%	14%	14%	20%
Prefer to bike	47%	32%	25%	26%
Prefer to walk	64%	61%	55%	58%
Need to drive	56%	83%	89%	89%



Travel Attitudes by Walkability

	Medium Walkability	Low Walkability	High Walkability
Prefer to take transit	13%	11%	27%
Prefer to bike	53%	52%	72%
Prefer to walk	22%	25%	36%
Need to drive	89%	93%	74%



Mode Split

(Weekends & Holidays)

	Low Walkability	Medium Walkability	High Walkability
Drove	64%	61%	60%
Passenger	28%	31%	27%
Bus	1%	1%	1%
Bike	1%	1%	2%
Walk	7%	6%	10%



Mode Split

PM Peak (Weekday)

	Low Walkability	Medium Walkability	High Walkability
Drove	73%	70%	55%
Passenger	14%	13%	10%
Bus	2%	3%	5%
Bike	2%	2%	6%
Walk	10%	12%	24%



Factors that influenced Walking Rates

- ✓ **Sex**
- ✓ **Age**
- ✓ **Vehicle Ownership**
- ✓ **Walkability**



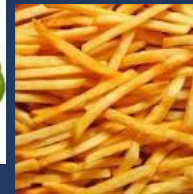
Food Environment & Dietary Data



3 times as much shelf space dedicated to junk food vs fruits and vegetables



Food Swamps



WHAT DID WE LEARN?

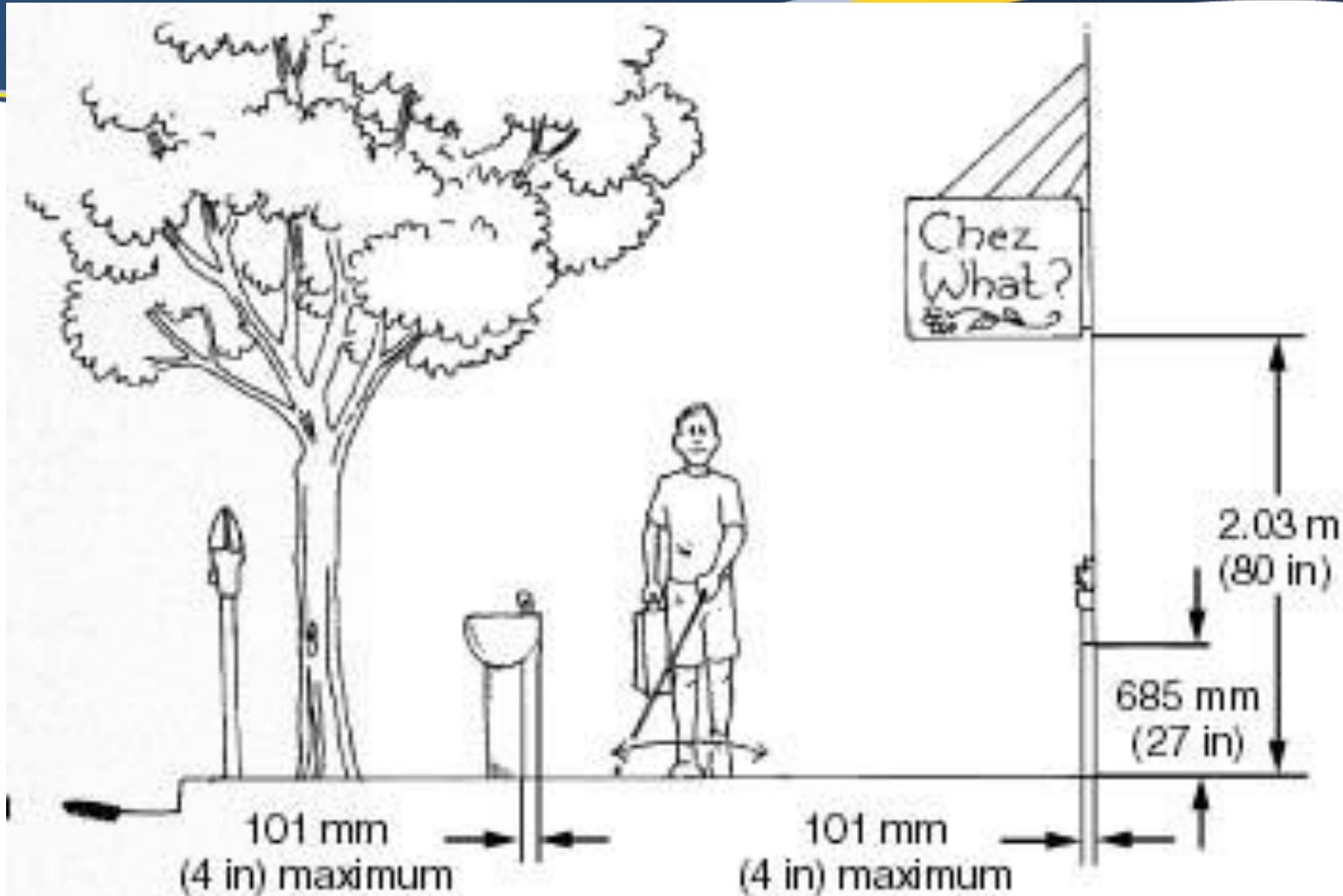




What did we learn from NEWPATH?

- **Walkability Matters!**
- **Basic GIS layers are harder than you think**
- **Need better indicators of the quality of the pedestrian environment**
- **Demographics are shifting – needs are shifting too**

Quality of Pedestrian Environment





today-bike-photos-top-10-reasons-to-bike/

<http://streets.wiki.wikispaces.com/Urban+Bicycling+With+Children>



<http://charlesotherpersonality.blogspot.ca/2011/08/older-cyclist-hit-while-walking-with.html>



Aging in Place, Stuck without Options:

Fixing the Mobility Crisis Threatening
the Baby Boom Generation



<http://t4america.org/resources/seniorsmobilitycrisis2011/>



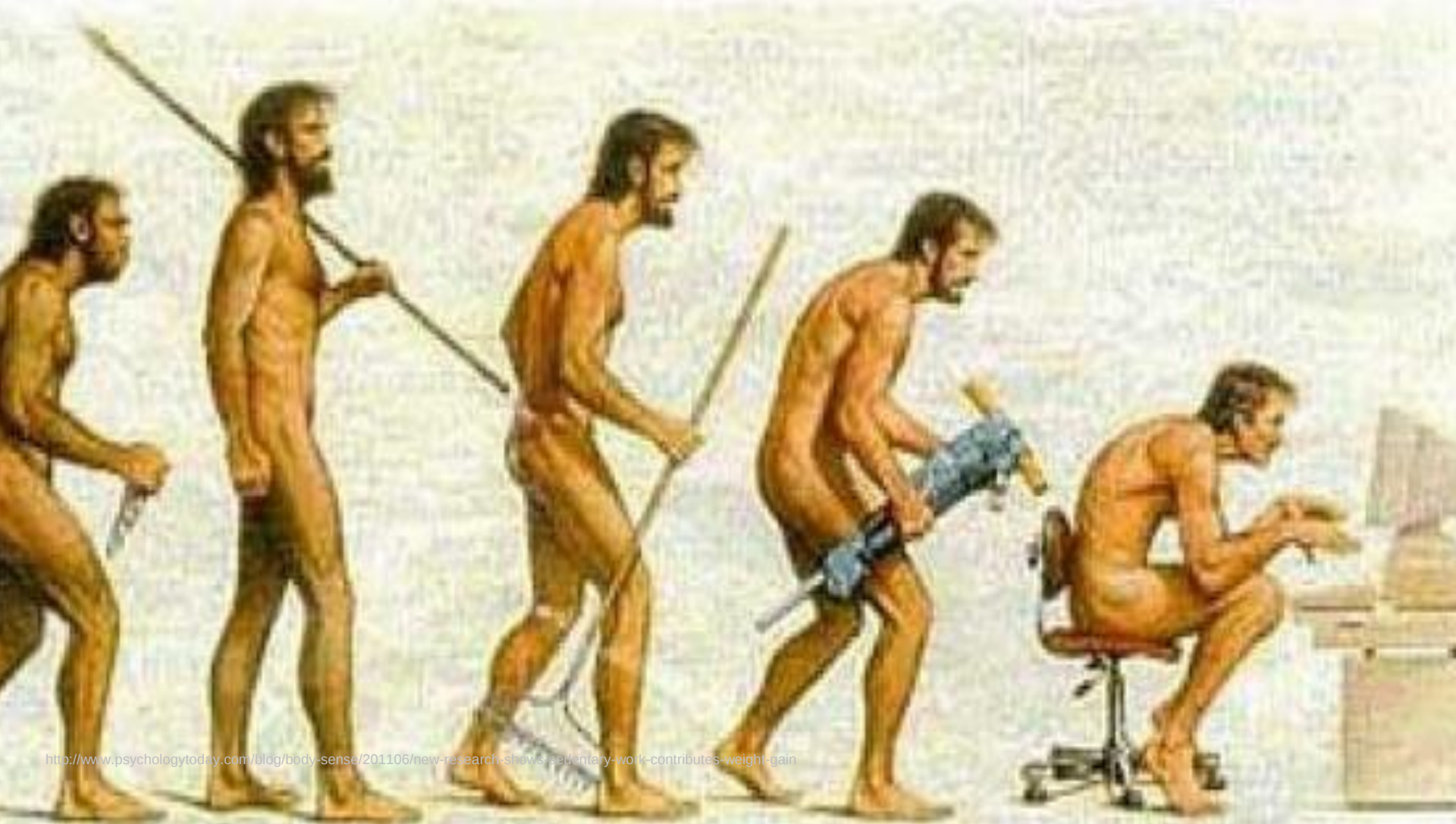
ifmo
Institute for
Mobility Research

'Mobility Y' – The Emerging Travel Patterns of Generation Y

http://www.ifmo.de/tl_files/publications_content/2013/ifmo_2013_Mobility_Y_en.pdf



Physical Activity Data



<http://www.psychologytoday.com/blog/body-sense/201106/new-research-shows-sedentary-work-contributes-weight-gain>

Exercising on the job 8



By Dan Dakin, Welland Tribune
Monday, January 28, 2013 7:05:25 EST PM



Jackie Gervais, a Niagara Region health promoter, walks a treadmill while responding to e-mails at the regional headquarters in Thorold Monday.





Health Outcome Outstanding Issues

- **What are the sentinel indicators?**
- **Where are the best source of data?**
- **What are the true costs of Chronic Disease treatment?**
- **Who pays ? Who saves?**



Evidence-Based Decision-Making: Health Impacts Software Tool

Dr. Larry Frank, President
(Bombardier Chair -- University of British Columbia)

Mr. James Chapman, Principal Planner

Suzanne Kershaw

Urban Design 4 Health, Ltd.

March 2, 2012



Evaluating changes to the Built Environment



Pat Fisher Principal Planner Region of Waterloo

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