

# Traffic Calming on Arterial Roads - Examples from Toronto

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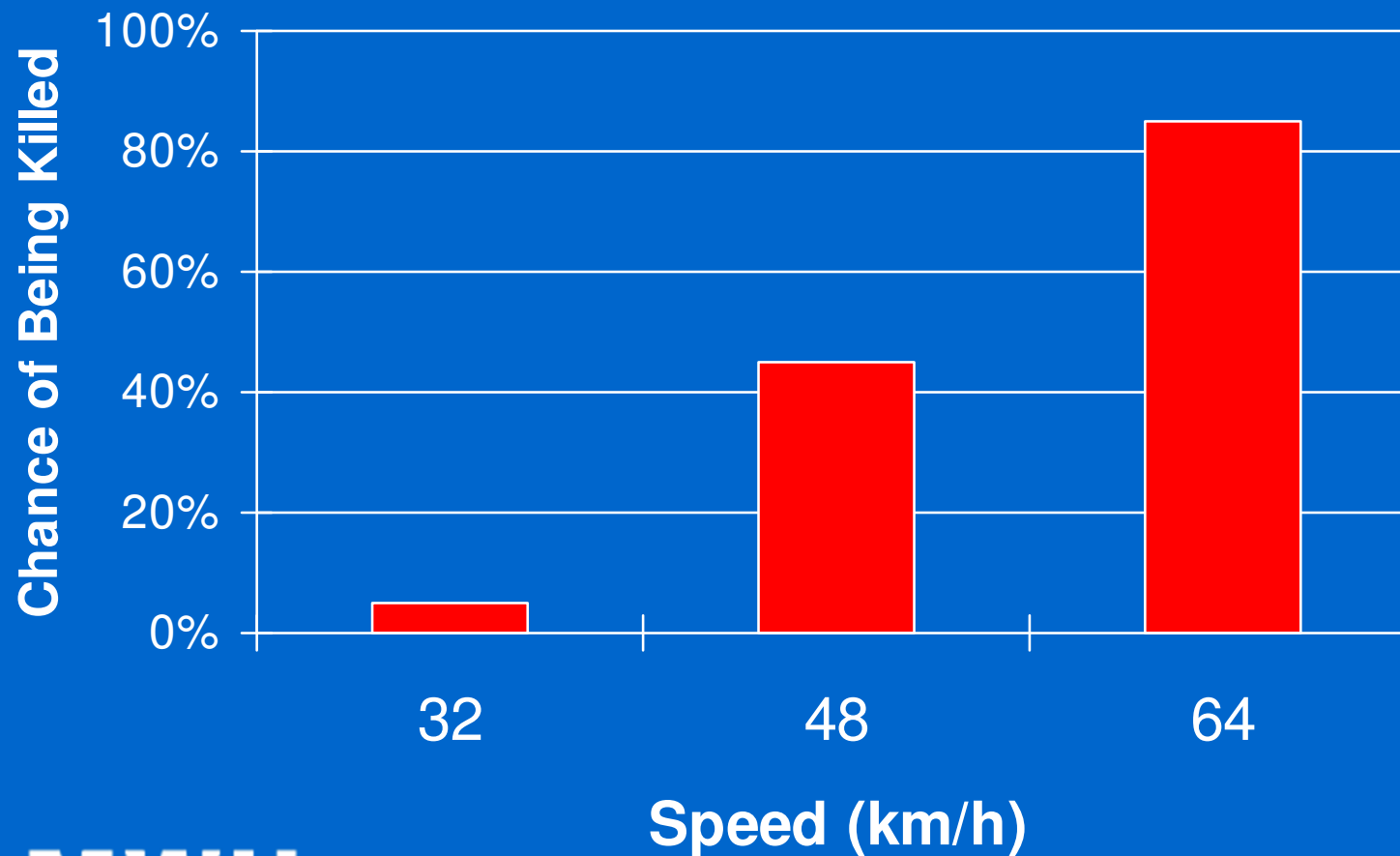
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# Pedestrian Fatality Rate versus Impact Speed



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# Default layout for four-lane roads

- ◆ Wide kerb lanes are standard
- ◆ Typically 3.8 m in kerb lane (40 km/h speed limit)
- ◆ 4.0 m to 4.5 m is better, especially with 50 km/h speed limits
- ◆ Many roads 14 m wide, as in NZ
- ◆ Parking often prohibited during peaks.



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## Three kinds of arterial road traffic calming

- ◆ All depend on reducing the number of general traffic lanes:
  - Road narrowing (kerb to kerb)
  - Introducing medians
  - Adding bicycle lanes
- ◆ Feasible if less than 20,000 vpd.

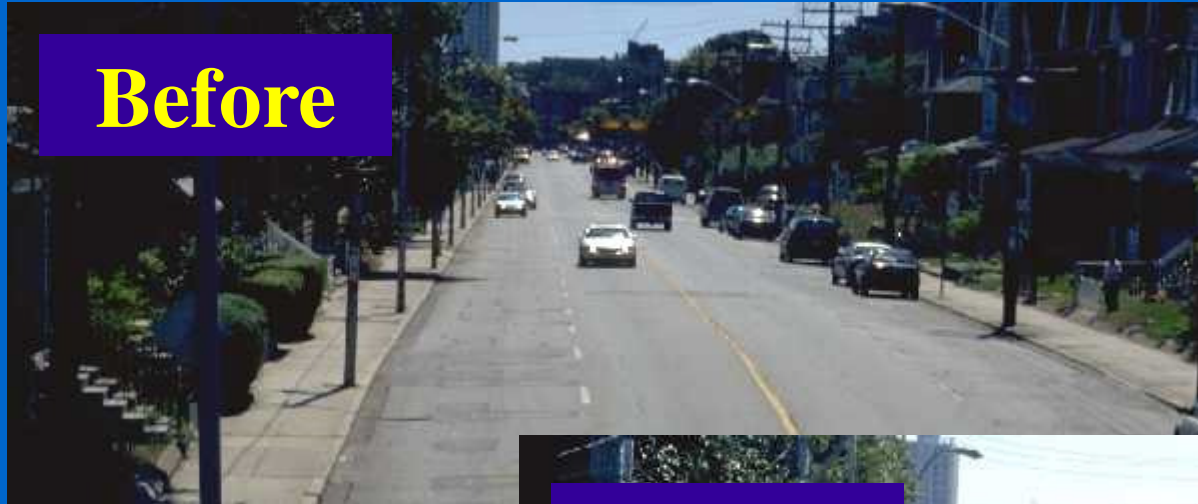


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# Lansdowne Avenue

**Before**



**After**



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# Lansdowne Avenue

- ◆ Reduced from 14 m to 10 m
- ◆ Four lanes to two plus parking one side
- ◆ Improved pedestrian safety
- ◆ Still handles 12,000 vpd plus busy bus route
- ◆ Has a fire station, school, dense residential use



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# Lansdowne Avenue



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# Pedestrian crossing modification eliminates lanes



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# Oriole Parkway - 4 lanes to 2



Flush median allows driveway access



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## Introducing flush medians can have disadvantages

- ◆ Often great for cars, OK for pedestrians, bad for cyclists (they get “squeezed”)
- ◆ Medians not “owned” by anyone
- ◆ Reduced “friction” of opposing traffic; increased motor vehicle speeds
- ◆ Better landscaping options available if roads narrowed from sides.



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# St. George Street



First narrowed with cycle lanes, flush median . . .



Then reconstructed with wider boulevards, cycle lanes retained.



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# St. George Street - 1996



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# Four lanes to two - plus parking



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# Parking and Pedestrian Refuge



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# Four lane underpass (22,000 vpd) reduced to two lanes



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# Custom design for each situation



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# Conclusions

- ◆ Traffic calming increases safety, especially for most vulnerable road users
- ◆ Reduces vehicle speeds
- ◆ Arterial roads can be “calmed”
- ◆ Can (and should) look good
- ◆ Part of the solution to reclaiming our cities from the car



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