Yonge Street Road Diet
A diet that really works!

Public Information Centre  May 15, 2017
Overview

1. What is a road diet?
2. Why not consider a road diet?
3. Why consider a road diet?
4. When is a road diet desirable?
5. The Yonge Street corridor
6. Can a road diet work on Yonge Street?
7. Implementing the road diet
1. What is a road diet?

The conversion of a 4-lane undivided road to a 3-lane undivided road with a centre two-way left turn lane (TWLTL)
1. What is a road diet?
2. Why **NOT** consider a road diet?

Possible drawbacks might include

- loss of passing opportunities
- increased delays at unsignalized access points during busy periods
- increased travel delays during busy periods
- impacts to transit
- impacts to curb-side services
3. Why consider a road diet?

Improved safety at mid-block locations

- reduction in vehicle conflicts
- fewer lanes
- dedicated bike lanes
- protected left turns

An analysis of 45 Road Diet sites in California, Iowa, and Washington showed a 29 percent reduction in total crashes\(^2\)
3. Why consider a road diet?

Improved safety at intersections

- reduction in vehicle conflicts
- fewer lanes
- dedicated bike lanes
- protected left turns
3. Why consider a road diet?

Improved safety with better visibility

- improved sight lines
- easier to make a left turn
- easier to see pedestrians & cyclists crossing
3. Why consider a road diet?

- Reduce or eliminate certain collision types
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Improved safety with lower speed differentials

- vehicle speeds can vary on 4 lane roads
- drivers slow or change lanes due to turning vehicles
- drivers may weave between lanes at high speeds
3. Why consider a road diet?

Operational benefits

- separates left turns
- improved entry/crossings for side-street traffic
- speed differential reductions

Will a Road Diet Increase Costs?

“We planned our Road Diet installation as part of the overlay, so there was no additional cost to the construction budget.”

- Robert Rocchio, Managing Engineer, Traffic Management & Highway Safety, Rhode Island DOT
3. Why consider a road diet?

Pedestrian & cyclist benefits

- reallocate space from travel lanes to bike lanes or sidewalks
- slower speeds
- shorter crossings

Road Diet Benefits

- 47% reduction in crashes
- 70% reduction in speeding
- 37% increase in bicyclists
- 49% increase in pedestrians

Health Care Foundation Greater Kansas City
4. When is a road diet desirable?

As per the *Road Diet Information Guide* a number of factors should be considered:

- safety
- speed of travel
- level of service
- quality of service
- traffic volumes
- turning volumes
- pedestrians & cyclists
- slow & stopping vehicles
- loading/unloading vehicles
- on-street parking
- at-grade crossings
5. Yonge Street corridor

Intersections & Traffic Control
- 3 signalized intersections
- 17 stop control intersections
5. Yonge Street corridor

Development & Access
- primarily single family lots with driveway access
- some commercial & institutional uses

- 65 driveways on the north side, 48 on the south
- sidewalk on both sides
5. Yonge Street corridor

- Traffic operations
  - Midland Transit operates in the WB direction
  - SCDSB bus service
  - Garbage/recyclables/compost collection

- Traffic volumes
  - 10,000 to 14,000 vehicles per day currently
  - 16,000 to 21,000 in the 2037 horizon
6. Can a road diet work on Yonge St?

- Appropriateness of road platform
  - road is of sufficient width to accommodate:
    - bike lanes
    - 1 travel lane per direction
    - centre turn lane

![Diagram of road layout with 14.0m road width and 3.5m lane widths]
6. Can a road diet work on Yonge St?

☑ Appropriateness of traffic volumes
  - road diets have been successfully implemented on roads serving 25,000 vehicles per day
  - current traffic volumes 10,000 to 14,000 vpd
  - 20 year traffic volumes 16,000 to 21,000 vpd

![AADT Counts by Roads & Streets]

- Great Candidate (<15K)
- Good Candidate (15-20K)
- Fair Candidate (20-25K)
- Poor Candidate (>25K) / Not Applicable
6. Can a road diet work on Yonge St?

Fifth St

Eighth St

Fourth St

AM PM AM PM
15s 12s 28s 30s
B B D D

delay & level of service

AM PM AM PM
15s 16s 17s 18s
B B C C

☑ Appropriateness of traffic operations
6. Can a road diet work on Yonge St?

☑ Appropriateness of intersections
  ▪ signalized intersections are sufficiently spaced to avoid queue issues
  ▪ only 2 instances of offset unsignalized intersections whereby lefts may overlap, but not considered critical
6. Can a road diet work on Yonge St?

- Improvements to cyclist & pedestrian facilities
  - bicycle lanes will have benefits to cyclists & the Town’s Active Transportation program
  - bicycle lanes will also provide buffer to the sidewalks
6. Can a road diet work on Yonge St?

- Impacts to transit & other services
  - all vehicles will share a single travel lane
  - increased potential for delays stemming from curb-side services
6. Can a road diet work on Yonge St?

The Town must consider their priority

- Improve traffic & pedestrian safety while maintaining acceptable traffic flow
- Move traffic with minimum delay and accept higher safety risks for other users
7. Implementing the road diet

Functional plans have been prepared to illustrate:

- the conversion from 4 to 3 lanes with bike lanes
- the phasing limits
- the transitions at the project limits
7. Implementing the road diet

Functional plans
Questions