

Risebrough Circuit & Eden Avenue Traffic Calming

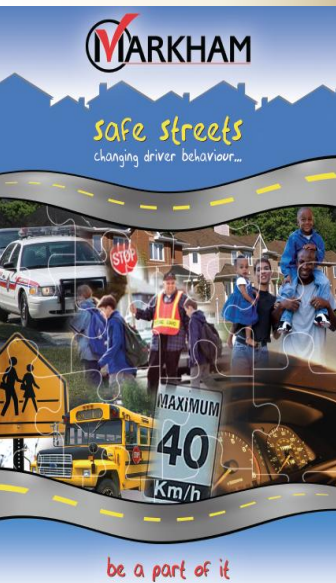
**Development Services
Committee**

May 25, 2010

Operations Department

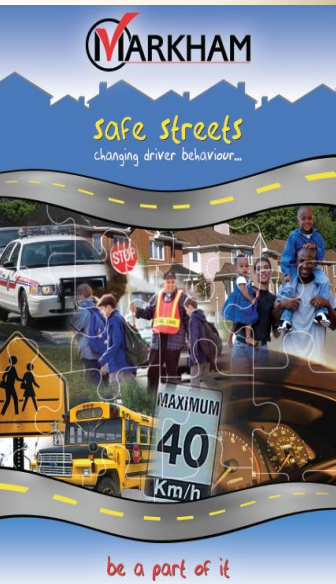
May 18, 2010 DSC Meeting

- On May 18, 2010, Council deferred the Eden Avenue / Risebrough Circuit traffic calming report and requested that staff report back on May 25, 2010 with the following:
 - A map identifying all traffic calmed roads in Ward 8
 - Rationale behind implementing traffic calming on Risebrough Circuit, south of Masseyfield Gate in 2000
 - Alternative traffic calming measures that would not compromise Transit or EMS services
 - Funding availability for physical traffic calming on Risebrough Circuit and Eden Avenue



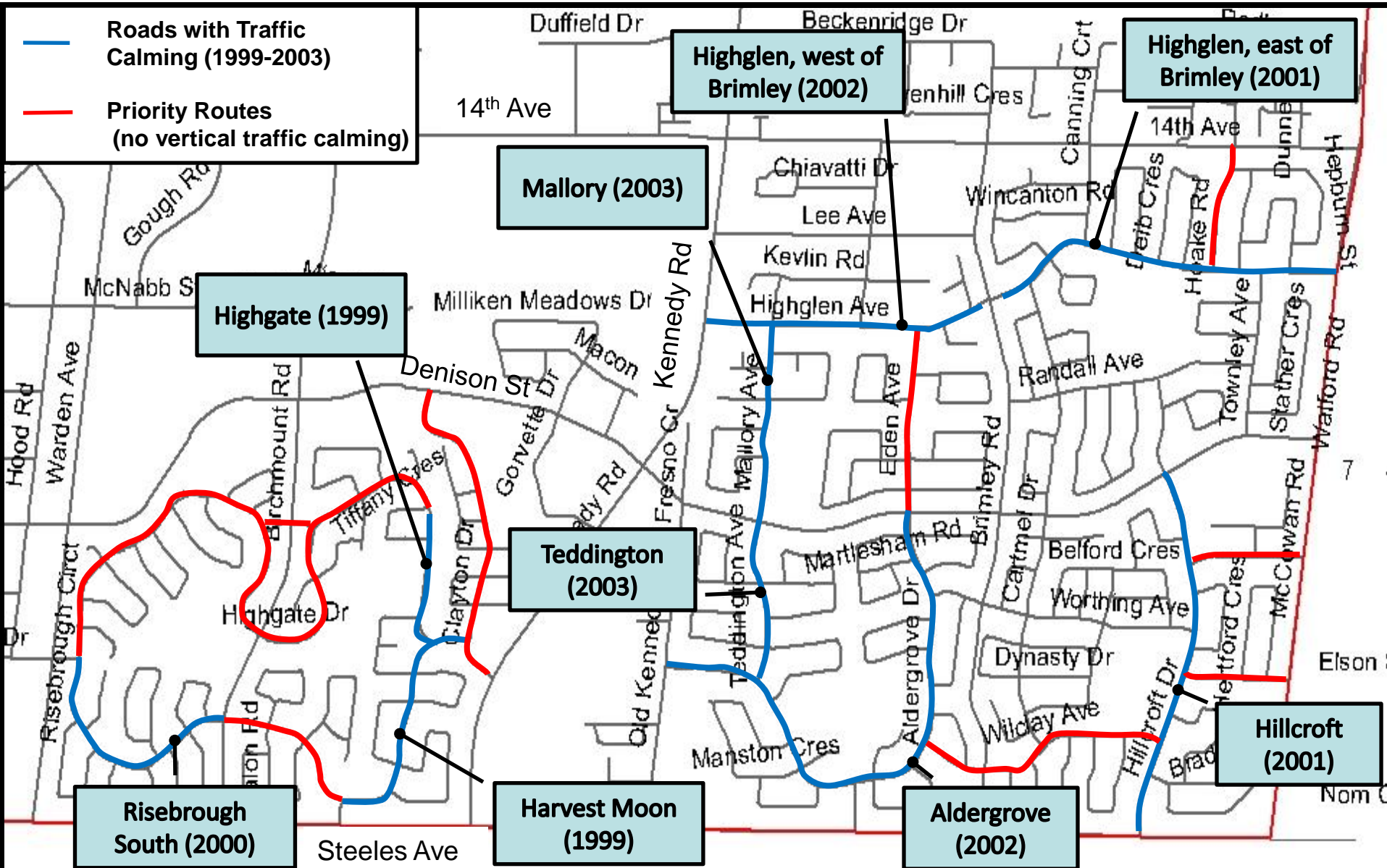
Agenda

- Existing traffic calming in Ward 8
- Existing traffic calming on Risebrough Circuit (south)
- Evolution of traffic calming practices in Markham
- 2004 Markham Safe Streets Strategy and it's relevance to Risebrough Circuit (north) and Eden Avenue
- Alternative traffic calming measures
- Staff recommendations



Traffic Calming in Ward 8 (1999-2003)

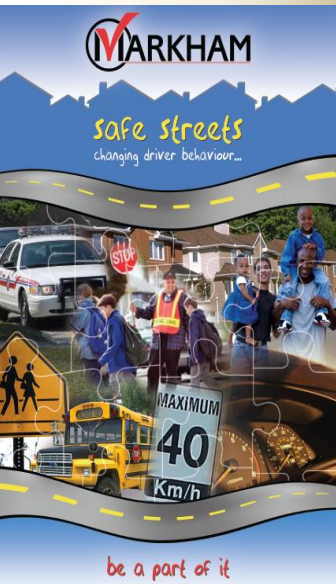
- From 2000 – 2004, 8 streets have been traffic calmed (speed humps)
- Streets with traffic calming (pre-2004) were “grandfathered” into the 2004 Safe Streets Strategy



Risebrough Circuit & Eden Avenue Traffic Calming

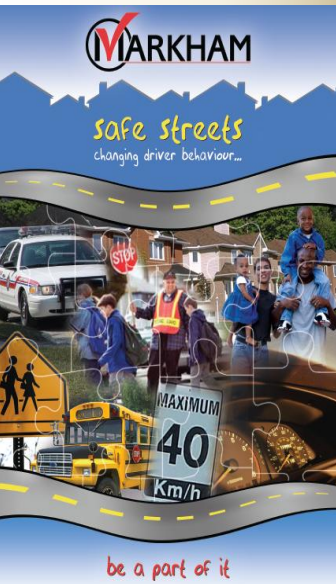
Existing Traffic Calming on Risebrough Circuit (south)

- In April 2000, Council requested that the Neighbourhood Transportation Committee (NTC) seek a solution to ongoing traffic concerns on Risebrough Circuit, including speeding and cut-through traffic between Warden/Masseyfield and Birchmount/Harvest Moon
- Solutions to address speeding were typically through physical traffic calming measures, mainly speed humps
- In October 2000, Council approved that Parkway Avenue and Risebrough Circuit (south) be provided with physical traffic calming
 - Replaced Willowbrook Rd. and Calvert Rd, which did not receive community support
- Through public consultation, NTC recommended that four (4) speed humps be installed on Risebrough Circuit, south of Masseyfield Gate only, to address the above noted concerns
- On October 20, 2000, Council approved NTC's recommendation to proceed with construction of speed humps on Risebrough Circuit, south of Masseyfield Gate, which were completed by the end of the year
- Implementation of speed humps had effectively reduced traffic speeds to satisfactory levels (47 km/h)



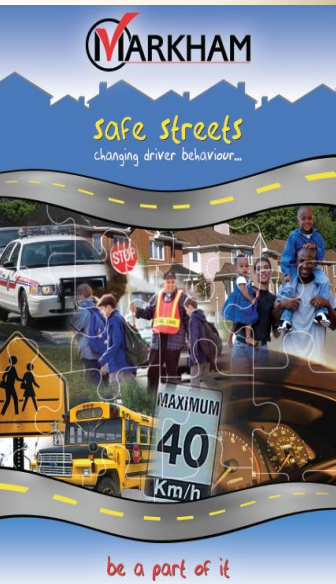
Evolution of Traffic Calming Practices in Markham

- On December 17, 2003, Council initiated the Markham Safe Streets Task Force (SSTF) to develop a more diversified and sustainable solution in improving traffic safety
 - While successful in reducing speeds, physical measures could not respond to the broader community concerns about safety on local roads
 - The requirements of the EA / public consultation process & limited staff resources could not keep pace with traffic concerns
 - Delayed fire & emergency response times
 - o Fire Services
 - Delay of 44 seconds per kilometre on roads with speed humps/raised intersections
 - Unrestricted fire growth increases exponentially after 4 minutes
 - o Emergency Services
 - Delay of 10 seconds per speed hump
 - Cardiac arrest survival rates: 65% @ 4 min., 25% @ 5 min.; <10% @ 7 min.
- On January 26, 2004, Council approved the SSTF terms of reference
 - Mandate was to develop a multi-faceted strategy to affect driver behaviour and improve safety on our local roads.
 - Composed of a resident from each of the eight wards, four members of Council, York Regional Police, YRT, EMS, both school boards and Town staff



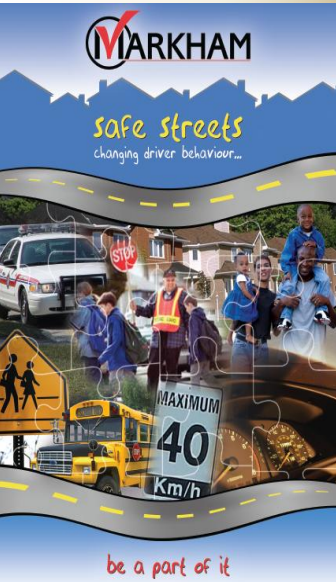
Markham Safe Streets Strategy

- **On September 27, 2004, Council approved the SSTF's proposed Safe Streets Strategy Report, which included:**
 - A 3-point strategy (Education, Enforcement, Engineering) to provide a more diversified approach to improving traffic safety on local roads
 - Identify "Priority Routes", where streets are not eligible for vertical traffic calming measures (ie. speed humps, raised intersections), to minimize impact to Fire, Emergency and Transit services
 - o Accommodates York Region Transit's Policy (2004) regarding traffic calming
 - o Minimizes impact to Fire and Emergency Services response times and equipment costs
 - o Roads with existing traffic calming measures would be "grandfathered"
- **A Traffic Safety Committee was formed to oversee the strategy and advise Council of candidate streets in an annual program**
 - Comprised of 8 residents (1 per ward), 2 Councillors, members from YRP, EMS and Town staff



Safe Streets Candidate Streets

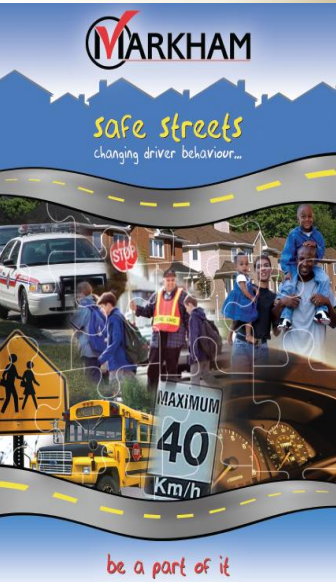
- **Each candidate street is point-ranked, based on various safety-related factors including:**
 - Vehicular Speed & Volume
 - Collision History
 - Proximity to Schools & Parks
 - Road Width
 - Transit Route
 - Sidewalk Provisions



Safe Streets Strategy – Risebrough Circuit (North)

- **Identified as a priority route (2004 Safe Streets Strategy)**
 - Not eligible for vertical traffic calming measures (speed humps, raised intersections)
- **Included in the 2007 program for increased education initiatives**
 - Community mail-out (Road Watch, Community Safety Village, Young Drivers)
 - Set-up booth at Markham Fair & other special events
 - As of 2010, operating speed is 49 km/h, which is comparable to the traffic calmed portions of Risebrough Circuit, south of Masseyfield Gate (47 km/h)
- **Over the past decade, both operating speeds and traffic volumes have decreased, as shown below:**

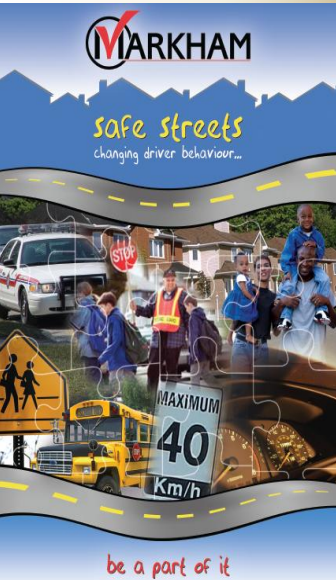
OPERATING SPEED (KM/H)			SPEED VARIANCE	AVERAGE DAILY TRAFFIC VOLUME			VOLUME VARIANCE
2001	2005	2010		2001	2005	2010	
52	52	49	-7%	1875	2269	1820	-2%



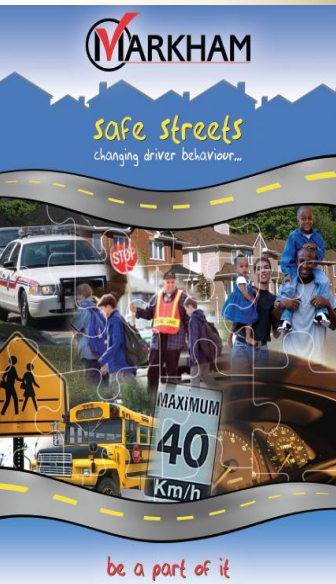
Safe Streets Strategy – Eden Avenue

- **Transportation Committee requested that the NTC consider Eden Avenue in 2001 Traffic Calming program**
 - NTC decided against including Eden Avenue in the 2001 program
- **Identified as a priority route (2004 Safe Streets Strategy)**
 - Not eligible for vertical traffic calming measures (speed humps, raised intersections)
- **Included in the 2005 program for enhanced enforcement initiatives**
 - Speeds reduced from 56 km/h (2004) to 53 km/h (2005)
 - Due to positive results, enhanced enforcement extended to early 2007
- **Over the past decade, both operating speeds and volumes have decreased, as shown below:**

OPERATING SPEED (KM/H)			SPEED VARIANCE	AVERAGE DAILY TRAFFIC VOLUME			VOLUME VARIANCE
2005	2007	2010		2005	2007	2010	
53	53	50	-6%	2574	2422	2548	-1%



Alternative Traffic Calming Measures for Priority Routes



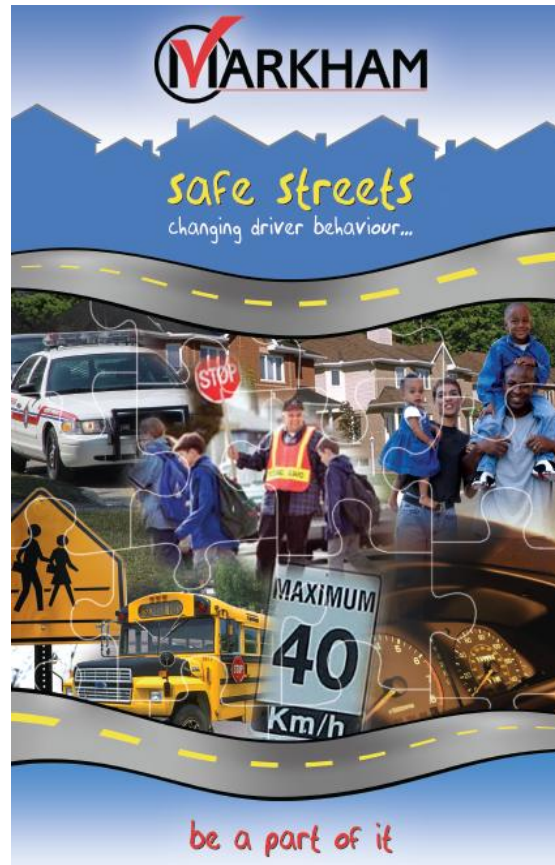
Raised Medians
Bicycle Lanes



Chicanes
Roundabouts



- That, although capital funding is available in the amount of \$247,000 (Capital Account #083-5350-8312-005), physical traffic calming not proceed on Risebrough Circuit (north) and Eden Avenue at this time
- And that Operations Department report back to Development Services Committee in late 2010 with the revised Safe Streets Strategy, which will include Risebrough Circuit and Eden Avenue as candidate streets
 - Enhanced police enforcement and education initiatives (speed display boards, Road Watch, etc.)
- And that, if education and enhanced enforcement is not effective, Staff will request that the local community submit a petition, with majority support for horizontal traffic calming measures (raised medians, chicanes) on the subject streets



Questions & Answers