3. ROADWAY NARROWING
3.2 Lane Narrowing

Description and Purpose

Lane narrowing is the process of reducing lane widths using pavement markings or other features (for example, bicycle lanes, street beautification programs, pavement texture).

The intention is for drivers to perceive the roadway to be less comfortable at higher speeds due to the narrowing of the lanes and ultimately reduce operating speeds.

Applicability

- **Road Class** – Local Streets, Collector Roads and Urban Arterials
- **Roadway Cross-Section** – Urban
- **Speed Limit** – 60 km/h or less
- **Average Daily Traffic** – All volumes
- **Town** – Primary measure

Cost – $-$$
Timeline – Temporary or Permanent
Engineering Study Required – Yes



Potential Traffic Calming Benefits

Speed Reduction	■
Volume Reduction	□
Conflict Reduction	■
Natural Environment	□

Implementation Considerations

Local Vehicle Access	□
Emergency Vehicle Response	■
Cycling Use	■
Traffic Enforcement	□
Vehicle Parking	■
Street Maintenance	□

□/□ No Benefit/Impact
■/□ Minor Benefit/Impact
■/■ Substantial Benefit/Impact

3. ROADWAY NARROWING
3.4 Raised Median Island

Description and Purpose

A raised median island is an elevated median constructed on the centerline of a two-way roadway to reduce the overall width of the adjacent travel lanes.

The purpose of a raised median island is to reduce vehicle speeds and to reduce pedestrian–vehicle conflicts.

Applicability

- **Road Class** – Local Streets, Collector Roads, Urban and Rural Arterials
- **Roadway Cross-Section** – Urban and rural, two-lane
- **Speed Limit** – 60 km/h or less
- **Average Daily Traffic** – All volumes
- **Town** – Implement where width permits and/or road reconstruction projects

Cost – $$-$$$
Timeline – Permanent
Engineering Study Required – Yes



Potential Traffic Calming Benefits

Speed Reduction	■
Volume Reduction	□
Conflict Reduction	■
Natural Environment	□

Implementation Considerations

Local Vehicle Access	■
Emergency Vehicle Response	□
Cycling Use	□
Traffic Enforcement	□
Vehicle Parking	■
Street Maintenance	■

□/□ No Benefit/Impact
■/□ Minor Benefit/Impact
■/■ Substantial Benefit/Impact

4. SURFACE TREATMENT
4.3 Transverse Rumble Strips

Description and Purpose

Transverse rumble strips are raised buttons, bars or grooves closely spaced at regular intervals on the roadway that create both noise and vibration in a moving vehicle.

The purpose of a rumble strip is to alert motorists to a traffic control device which is associated with unusual or changing conditions ahead. Rumble strips are sometimes incorrectly used in a standalone mode as a speed control device.

With rumble strips, motorists are alerted by minor vertical deflection of vehicle wheels and audible warning created as vehicles wheels pass over.

Applicability

- **Road Class** – Local Streets, Collector Roads, Rural Arterials
- **Roadway Cross-Section** – Urban and rural (usually one lane per direction)
- **Speed Limit** – All speed limits
- **Average Daily Traffic** – All volumes
- **Town** – Primary measure

Cost – $
Timeline – Permanent
Engineering Study Required – Yes



Potential Traffic Calming Benefits

Speed Reduction	■
Volume Reduction	□
Conflict Reduction	□
Natural Environment	□

Implementation Considerations

Local Vehicle Access	□
Emergency Vehicle Response	□
Cycling Use	■
Traffic Enforcement	□
Vehicle Parking	□
Street Maintenance	■

□/□ No Benefit/Impact
■/□ Minor Benefit/Impact
■/■ Substantial Benefit/Impact

9. ENFORCEMENT AND EDUCATION
9.1 Speed Display Devices

Description and Purpose

A speed display device is an interactive sign that displays vehicle speeds as oncoming motorists approach. Vehicle speed is captured using radar and can trigger the display board to show when vehicles approach at predetermined undesirable speeds. Can be used upstream of targeted speed enforcement.

Applicability

- **Road Class** – Local Streets, Collector Roads, Urban and Rural Arterial Roads
- **Town** – Prior to implementing physical traffic calming and/or compliments other measures

Cost – $
Timeline – Temporary or Permanent
Engineering Study Required – No



Potential Traffic Calming Benefits

Speed Reduction	■
Volume Reduction	□
Conflict Reduction	□
Natural Environment	□

Implementation Considerations

Local Vehicle Access	□
Emergency Vehicle Response	□
Cycling Use	□
Traffic Enforcement	■
Vehicle Parking	□
Street Maintenance	■

□/□ No Benefit/Impact
■/□ Minor Benefit/Impact
■/■ Substantial Benefit/Impact

3. ROADWAY NARROWING
3.6 Vertical Centreline Treatment

Description and Purpose

The use of vertical treatments such as flexible post-mounted delineators or raised pavement markers to create a centre median. This could be used to give drivers a perception of lane narrowing and create a sense of constriction.

Flexible post-mounted delineators are similar in appearance to bollards. They are commonly used in work zones, high-occupancy vehicle (HOV) lanes, and on-ramp exits to direct vehicles or prevent certain movements.

Applicability

- **Road Class** – Local Streets, Collector Roads, Rural Arterials
- **Roadway Cross-Section** – Urban and rural, two-lane
- **Speed Limit** – 80 km/h or less
- **Average Daily Traffic** – All volumes
- **Town** – Primary measure

Cost – $
Timeline – Temporary or Permanent
Engineering Study Required – Yes



Potential Traffic Calming Benefits

Speed Reduction	■
Volume Reduction	□
Conflict Reduction	□
Natural Environment	□

Implementation Considerations

Local Vehicle Access	□
Emergency Vehicle Response	□
Cycling Use	□
Traffic Enforcement	□
Vehicle Parking	□
Street Maintenance	■

□/□ No Benefit/Impact
■/□ Minor Benefit/Impact
■/■ Substantial Benefit/Impact