

Traffic Calming Fact Sheets

May 2018 Update

Closure

Description:

- **Half closures** are barriers that block travel in one direction (creates a one-way street) for a short distance on otherwise two-way streets; sometimes called partial closures or one-way closures
- **Full-street closures** are barriers placed across a street to completely close the street to through-traffic, usually leaving open space for pedestrians and bicyclists; they are sometimes called cul-de-sacs, dead-ends, or mini-parks

Applications:

- Appropriate for local streets (half and full), at intersection (half and full), or mid-block (full closure only)
- Typically applied only after other measures have failed or are deemed inappropriate or ineffective
- Typically found on closed-section roadways (i.e. curb and gutter)
- Can be applied with and without dedicated bicycle facilities and on roads with on-street parking
- Often used in sets to make travel through neighborhoods more circuitous
- Not appropriate along bus transit routes
- Can be used to assist crime prevention



(Source: James R. Barrera, Horrocks, New Mexico)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Potential legal concerns
- Can be placed at intersections or mid-block locations
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or other obstructions that result in openings smaller than the width of a typical passenger car
- Appropriate signing needed at entrances to full-closure street blocks
- May require modifications to maintain surface drainage capacity
- Should consider traffic diversion patterns and associated impacts
- Possible to make diverters passable for pedestrians and bicyclists

Potential Impacts:

- Concerns regarding street network connectivity and capacity
- May result in traffic diverting to other local streets (should be used in groups/clusters)
- No significant impact on vehicle speeds beyond the closed block
- Can improve pedestrian crossing safety

Emergency Response Issues:

- Full or half closures can increase response times and should not be used on roads/streets that provide access to hospitals or emergency medical services; half closures allow for a higher degree of emergency vehicle access than full closures
- Both closure types can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

Typical Cost (2017 dollars):

- **Full Closure** - <\$10,000 for simple closures, to \$100,000 for complex closures with drainage mods.
- **Half Closure** - \$3,000 for simple closure, to \$40,000 for complex closures with drainage mods.

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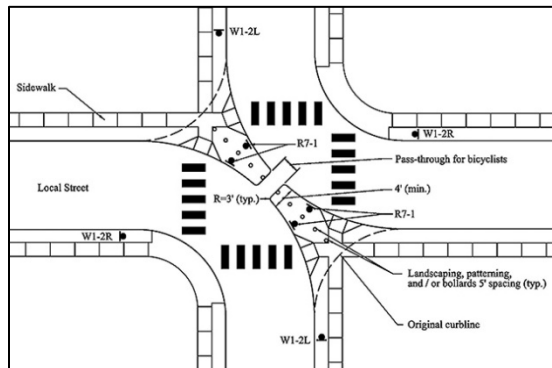
Diagonal Diverter

Description:

- Barriers placed diagonally across four-legged intersections, blocking through movements
- Sometimes called full diverters or diagonal road closures

Applications:

- Typically applied only after other measures are deemed ineffective or inappropriate
- Provisions are available to make diverters passable for pedestrians and bicyclists
- Often used in sets to make travel through neighborhoods more circuitous



(Source: Delaware Department of Transportation)



(Source: PennDOT Local Technical Assistance Program)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Possible legal issues associated with closing public streets (e.g., business and/or emergency access)
- Can only be placed at intersections
- Can be used on both one-way and two-way streets
- Typically found on closed-section roads (i.e. curb and gutter)
- Typical maximum appropriate speed limit is 25 mph
- Maintain drainage as necessary to mitigate potential flooding
- Corner radii should be designed to allow full-lane width for passing motor vehicle traffic
- SU-30 default design vehicle
- Appropriate signing and pavement markings needed on approaches
- Openings for pedestrians and bicyclists should allow movement between all intersection legs
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a typical passenger car

Potential Impacts:

- Concern regarding impacts to emergency response, street network connectivity, and capacity
- Should consider traffic diversion patterns and associated impacts
- No significant impacts on vehicle speeds beyond the approach to the diverter
- Not appropriate for bus transit routes
- Improved pedestrian and bicycle safety

Emergency Response Issues:

- Should not be used on roads that provide access to hospitals or primary emergency services
- Restricts emergency vehicle access through intersections
- Can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

Typical Cost (2017 dollars):

- Typical cost of \$6,000 for diverter with limited drainage modifications

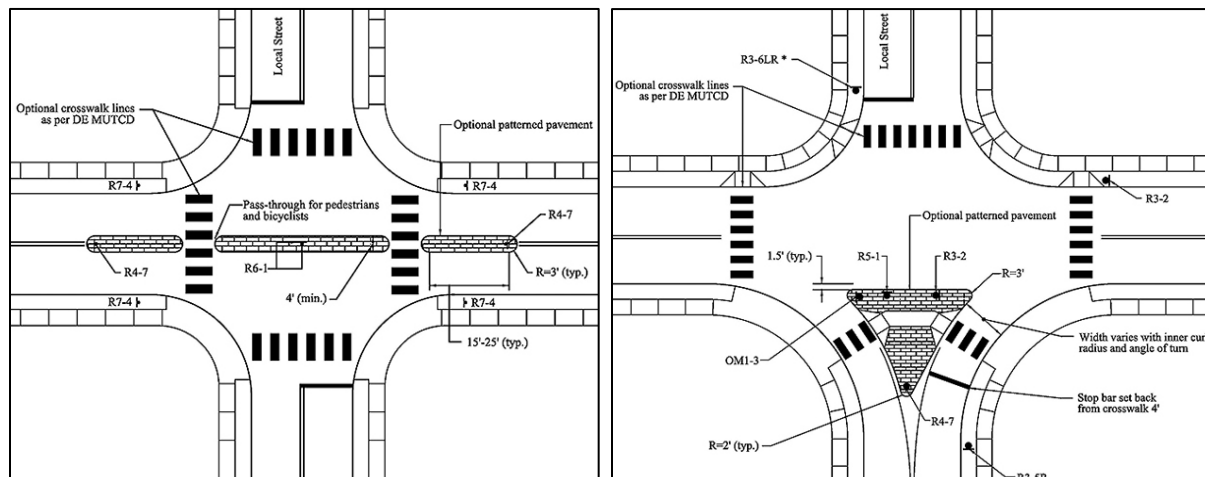
Median Barrier/Forced Turn Island

Description:

- Raised islands along the centerline of a street and continuing through an intersection that block the left-turn movement from all intersection approaches and the through movement from the cross street; also called median diverter, intersection barrier, intersection diverter, and island diverter
- Raised island that forces a right turn is called a forced turn island

Applications:

- For use on arterial or collector roadways to restrict access to minor roads or local streets and/or to narrow lane widths
- Typically applied only after other measures have failed or been deemed inappropriate/ineffective
- Barriers are made passable for pedestrians and bicyclists
- Often used in sets to make travel to/through neighborhoods more circuitous



(Source: Delaware Department of Transportation)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Potential legal issues associated with blocking a public street (e.g., business/emergency access)
- Placed on major roads on approaches to and across intersections with minor roads
- Should extend beyond the intersection to discourage improper/illegal turn movements
- Barriers may consist of landscaped islands, mountable features, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a passenger car

Potential Impacts:

- May divert traffic volumes to other parallel and/or crossing streets
- May require removal or shortening of on-street parking zones on approaches/departures
- May impact access to properties adjacent to intersection
- No significant impacts on vehicle speeds beyond the approaches to intersection

Emergency Response Issues:

- Restricts emergency vehicle access using minor street
- Can be designed to allow emergency vehicle access

Typical Cost (2017 dollars):

- Cost between \$1,500 and \$20,000, depending on length and width of barriers