

Bump Out / Curb Extension

What Is a Bump Out / Curb Extension?

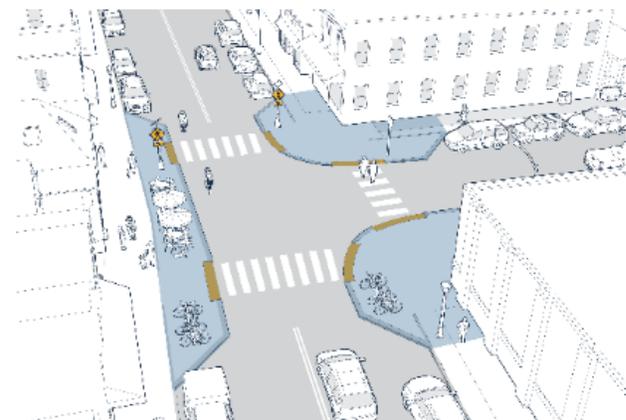
A bump out / curb extension is when the curb running parallel to the traveled way is altered to reduce the lane width near the intersection or pedestrian crossing. This forces vehicles to be restricted to a smaller area when approaching the bump out, making the driver feel less comfortable and potentially reduce their speed. A bump out also increases pedestrian safety by making the crossing distance shorter and enhancing the visibility of the pedestrians to drivers.

When To Use

A bump out / curb extension is often used at intersections or mid-block crossings where parking exists, and the roadway is wider than two standard lane widths. The bump out should not extend into bike lanes.

Pros and Cons

Pros	Cons
Narrows the road to reduce driver comfort and potentially reduce speeds.	Moderate to high cost.
Reduces pedestrian crossing distance.	Moderate construction impacts.
Makes pedestrians more visible to drivers.	May impact drainage causing utility improvements to be needed.
	Can make turning movements for larger vehicles difficult.



Central Island / Median Refuge

What Is a Central Island / Median Refuge?

A central island is a raised concrete surface in between two opposing lanes of traffic. A median refuge would be a cut through area within the island at a crosswalk location. This would allow a pedestrian to take refuge while crossing the street and create a waiting space if both directions of traffic cannot be crossed at once.

The presence of a central island and median refuge may cause drivers to become more aware of their surroundings and pedestrians. A central island will add a physical barrier to the travel lane making the lane appear more constrained.

When To Use

A central island or median refuge should be used on roadways wider than two standard lane widths, where pedestrians need to cross multiple lanes. These are typically implemented on medium to high traffic volume roadways and are often paired with signage or pedestrian flasher systems.

Pros and Cons

Pros	Cons
Increased pedestrian safety.	Moderate to high cost.
Provides a midway stopping point for slower pedestrians.	Moderate construction impacts.
May cause drivers to slow down.	May require additional design considerations if no median currently present.



Choker / Chicane

What Is a Choker and Chicane?

A choker is a way to reduce the street width for a short distance by extending the curb into the street on either side at the same location. It should be used to narrow the street to 22 feet for two-way traffic. This physical narrowing of the roadway increases a driver’s awareness.

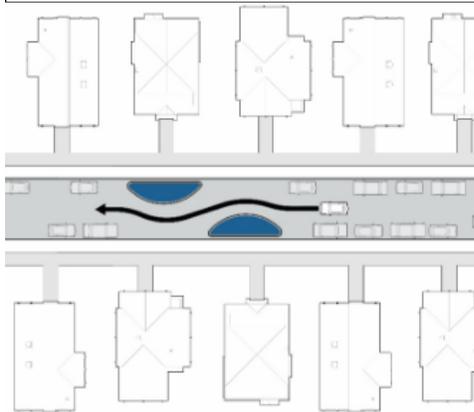
A chicane is like a choker, but the bump outs are offset to create an unexpected curve in the road. Drivers must take precautions navigating the curve in an otherwise straight roadway.

When To Use

This traffic calming measure should only be considered on low volume roads with a total width of 32 feet or greater. They should be used at a mid-block location and should not be used on any major bike routes.

Pros and Cons

Pros	Cons
May reduce speeds and traffic volumes.	Moderate construction impact to residents.
Potential to increase aesthetic nature of street with additional green space.	Could shift traffic to other neighboring streets.
	Increased maintenance with striping and snow plowing.
	Parking would be removed in the area.





One-Way Street

Description

A two-lane street may be converted to a one-way street to allow traffic to move in one direction only. The conversion of a roadway to a one-way road often includes additional signage, striping, and potential geometric changes to the roadway, depending on surrounding circumstances.

When To Use

One-way streets may be used to reduce the number of vehicles using the street as a cut-through. Access to homes and the need to create a pair of one-way streets need to be considered.

Pros and Cons

Pros	Cons
May reduce traffic volumes.	Emergency response time could be affected.
Cost effective alternative.	Access to adjacent properties may be less convenient.
Provides opportunities for bike lanes or pedestrian facilities if none are present.	May lead to more speeding.

Pavement Markings & Signage

Pavement Marking Description

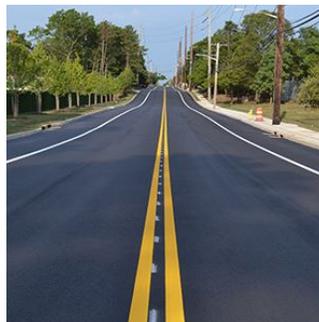
Pavement markings provide a way to delineate traffic lanes and provide guidance or warning to a driver. Pavement markings can be used to create narrow travel lanes resulting in a reduction of the driver's comfort level, forcing the driver to take extra precautions while driving. Pavement marking symbols can be used to deliver messages to drivers showing what the speed limit is or if they are entering a school zone. Crosswalks can also be painted to indicate pedestrian crossing locations, but should be used with caution at intersections without stop signs or signals as they can create a false sense of safety to pedestrians who may think a vehicle will stop for them.

Signage Description

Signage can be used to inform and alert drivers to speed limits, pedestrian crossings, geometric changes in the road, limited visibility, or other unexpected roadway treatments. The City will follow the guidance in the Wisconsin Manual of Uniform Traffic Control Devices when evaluating signage requests. The City has a separate Stop and Yield Sign Policy that can be followed for those requests. Stop or Yield signs will not be installed solely for the purpose of traffic calming as studies have shown that unwarranted installation may decrease safety for pedestrians and motorists.

Pros and Cons

Pros	Cons
Cost effective.	Additional maintenance for public works.
Easy to implement.	Potential loss of parking.
Little to no construction impact on residents.	May not be as effective as physical alterations to the street.



Speed Display Sign

What Is a Speed Display Sign?

A speed display sign is a sign which displays the speed of the vehicle approaching it, to give the driver a reminder of their current speed. The sign will flash or display a message if the vehicle is at speeds greater than the posted speed limit, hopefully influencing the driver to adjust their speed accordingly. These can be installed as a standalone sign with a permanent post in the ground or attached to an existing speed limit sign already in place. Some speed display signs can collect speed data, helping to evaluate speeding concerns.



When To Use

Speed display signs can be used in a wide range of locations, so long as space and visibility are present. Speed display signs are effective on stretches of roadway with few stopping points, where vehicles are free flowing through uncontrolled (no stop signs or signals) or two-way controlled intersections.

Pros and Cons

Pros	Cons
Cost effective when compared to geometry changes.	Lights from sign may be an annoyance to residents directly adjacent to the sign.
Simple installation with little to no construction impact to residents.	Does not actually force the driver to take extra precaution when traversing roadway but relies on drivers' intuition.
Increase driver awareness of the posted speed limit.	
Can be used on higher volume streets.	
No impact to emergency vehicles or snow plowing operations.	

Traffic Circle

What Is a Traffic Circle?

A traffic circle is a circular island placed in the center of an intersection, forcing drivers to take extra precautions to maneuver around the obstruction and navigate through the intersection. A traffic circle consists of the following: a curb or raised concrete surface in the shape of a circle, signage directing traffic to yield and navigate around the circle, and greenspace in the center to further encourage traffic calming. Landscaping in the center may be used if the neighborhood agrees to maintain the plants.

When To Use

A traffic circle should be used at an uncontrolled intersection (no stop signs) within residential neighborhoods with low volume streets.

Pros and Cons

Pros	Cons
Forces drivers to reduce speed to maneuver around the circle.	May limit parking near intersection.
Moderate construction cost.	Increased maintenance costs associated with landscaping and signage
Reduce crash severity.	May be confusing to some drivers.

