

Flex Lane on US 12/18 (Beltline), Madison

Frequently Asked Questions



What is the Flex Lane?

Known nationally as dynamic part-time shoulder use, the Flex Lane is a traffic management and operation strategy for addressing congestion and reliability issues. The practice, currently in use in 18 states including Wisconsin, involves using the left or right shoulders of an existing roadway for temporary travel during certain hours of the day. The Flex Lane is an interim measure to alleviate congestion and provide travel time reliability.

Where is the Flex Lane in Wisconsin?

The Wisconsin Department of Transportation (WisDOT) improved the inside median shoulders on US 12/18 (Beltline), between Whitney Way and I-39/90, in Madison. The median shoulder is designed to provide an additional travel lane – Flex Lane – during peak traffic periods, typically during morning and afternoon rush hours.

What is the long-term strategy for the Madison Beltline?

It's important to note the Flex Lane is one solution to improving transportation in the Madison area. A comprehensive Madison Beltline study is underway to examine long-term solutions. WisDOT is collaborating with local stakeholders to examine all modes of transportation connected to the Beltline. Among the items being studied are improved transit, pedestrian and bicycle connections, park and ride connections, and new crossings and connections.

When is the Flex Lane open for use?

The Flex Lane typically opens during weekday morning and afternoon peak times to help keep travel times reliable. Other factors (i.e., debris, weather conditions, and communication/device issues) may keep the Flex Lane closed for safety. The Flex Lane is closed during weekends, but may open for special events.

Why isn't the Flex Lane available all day?

The Flex Lane is only available during the typical high-volume morning and afternoon peak travel periods to help alleviate congestion and address existing safety concerns. Outside of the high-volume morning and afternoon peak periods, there is available (reserve) capacity in the existing system (lanes). By restricting shoulder lane use to the peak periods of travel only, the full shoulder width is available during the other portions of the day for emergency stopping and recovery of disabled vehicles and/or debris.

What is the necessary criteria to consider activating the Flex Lane?

The Flex Lane typically opens for morning and afternoon peak hours when traffic congestion commonly occurs. The Flex Lanes may open or close to assist in incident response or weather events.

How is the Flex Lane monitored?

The Flex Lane is operated by the WisDOT Traffic Management Center (TMC) in Milwaukee. Flex Lane specialists constantly monitor during first and second shifts (6 a.m. to 10 p.m.). Additionally, TMC Control Room Operators will monitor the Flex Lane for abandoned vehicles during weekend and overnight hours to help keep the lanes clear for use when needed. Partnerships with Dane County agencies are a vital part of the situational awareness. The TMC also relies on traffic cameras and detectors for real-time conditions and ensure the equipment is operating correctly.

Is the Flex Lane clear of debris prior to each opening?

The Dane County Highway Department performs monthly street sweeper cleaning for small particles or sand type debris. Large debris is also be handled by the Dane County Highway Department along with the Beltline Freeway Service Team (FST) during their daily opening sweep. During incident cleanup, the area is cleaned thoroughly prior to opening of the Flex Lane.

How do I know when the Flex Lane is open or closed?

Green arrows on the signs indicate the Flex Lane is open to traffic. Traffic cameras along the Beltline are accessible on 511wi.gov for real-time conditions, including views of the eastbound and westbound Beltline.

What will I see when the Flex Lane is about to close?

There are three potential scenarios for when the Flex Lane will close:

- Full lane closure will display yellow X on all signs before the red X displays on all signs.
- Partial lane closure (example is opening the lane partially to ease congestion due to a crash) will display one yellow X prior to the red X displays on downstream signs.
- End of Lane displays two yellow X followed by one Yellow merge graphic followed by two red X.

What if the Flex Lane closes while I'm in it?

There is a minimum 30-second buffer when the green arrow turns to a yellow X before the red X appears. If you see a yellow X, the lane is closing and you must change lanes.

Is this a High Occupancy Vehicle (HOV) or express lane?

No. The Flex Lane can be used by any vehicle, regardless of occupancy levels. Also, a driver can enter and leave the Flex Lane as needed. Trucks over five tons and vehicles pulling trailers are not allowed to use the Flex Lane.

Will there be changes to the posted speed limit?

The speed limit remains 55 mph on the Beltline. Drivers are urged to follow the posted speed limit.

Will there be speed restrictions for the Flex Lane?

The Flex Lane speed limit is the same as the adjacent general purpose lanes.

How is the Flex Lane enforced?

Enforcement of on and off-peak shoulder lane usage is similar to speed or other traffic violation enforcement. Additional discussion with area law enforcement took place to determine if, and to what extent, additional enforcement may be necessary.

What stops drivers from using the Flex Lane when it's closed?

Law enforcement can issue a citation to drivers for 'Failure to Obey a Traffic Sign.' It's the same as failure to yield at a yield sign, ignoring flashing lights, making an illegal U-Turn, or running a stop sign.

Has WisDOT coordinated with the area first responders?

WisDOT coordinated with area first responders throughout project design. This coordination was essential, and many elements were considered in the project design. WisDOT continued collaboration with first responders to work through operation scenarios and protocols.

Due to the strong collaboration with first responders, WisDOT received some of their endorsements for the Flex Lane concept. Throughout construction, WisDOT also worked with first responders and hosted information sessions to ensure agencies are informed of the project and incident response/management.

What if a car breaks down or there is a crash in the Flex Lane?

If a car breaks down while traveling in the Flex Lane during hours of operation, the vehicle should move to the outside (right side) shoulder, if possible. If the vehicle must stop in the Flex Lane, drivers should remain in their vehicle with their seat belt fastened and turn on the vehicle's emergency hazards.

The Traffic Management Center staff will change the dynamic signage to close the Flex Lane until the vehicle is safely removed by emergency response vehicles/tow trucks. It's an important reminder for drivers to pay attention to the road ahead and expect the unexpected.

The outside shoulders will remain as they are currently used for disabled vehicles or incident management. Crash investigation sites are also provided at strategic locations along the Beltline.

[Watch how to drive the Flex Lane video](#), which includes an incident scenario.

How do emergency responders get to a crash if all lanes are blocked with traffic?

Over the past few years, WisDOT staff coordinated with the Dane County Sheriff's Office and Dane County Highway Department to provide timely response to potential incidents and maintenance efforts. Information sessions helped WisDOT and first responder agencies discuss solutions to crash scenarios and provide efficient response time.

How is Flex Lane usage and crashes be monitored?

Traffic cameras are installed along the Beltline to monitor the Flex Lane corridor. The cameras and vehicle detection are monitored by operators at the Department's Traffic Management Center.

Why are the lanes so narrow? It doesn't feel safe with large trucks in an adjacent lane.

The new lane configuration on the Beltline is a 10-foot outside shoulder; three 11-foot lanes; and 13-foot median shoulder/Flex Lane in each direction. When the Flex lane is active, it is a 10-foot lane with a 3-foot shoulder. The travel lanes accommodate most vehicle widths as well as semi-trucks. It's important to note trucks over five tons and vehicles pulling trailers are not allowed in the Flex Lane.

WisDOT continually reminds motorists that they are in the driver's seat to make a difference on Wisconsin highways. Drivers should watch the road ahead, expect the unexpected, follow the posted speed limits and leave room to brake. WisDOT staff continue to work with local law enforcement for routine patrols on the Beltline to conduct speed enforcement. In addition, the department monitors traffic volumes, speeds and crash data along the Beltline, and will continue to do so after the Flex Lane opens.

It is important to note that recent studies show an overall reduction in crashes within the areas where shoulder running is used in other states.

How close are vehicles to the median barrier wall?

When the Flex Lane is open, vehicles have a 10-foot driving lane and three feet from the driving lane to the adjacent median barrier. When the Flex Lane is closed to traffic, drivers have a 13-foot wide median shoulder.

How many cameras and lane control signs are located on the Beltline for the Flex Lane?

- Dynamic Message Signs (DMS): Five
- Lane Control Signs (LCS): 52
- Number of LED lights: 814,080
- Traffic cameras: 36
- Traffic detectors: 32

Are those lane signs LEDs? Won't they get covered in snow and be hard to see?

Similar to the other electronic message boards on Wisconsin highways, the message boards are designed to help combat moderate snow and ice conditions. If snow/ice accumulates on the signs, technicians will work to clear those signs as soon as safely possible. Most of the electronics to operate the LED display are on the front of the sign, which typically generates enough heat to melt snow and ice.