



## Legislation Text

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### **CITY COUNCIL AGENDA ITEM**

#### **ACTION REQUESTED:**

Provide direction regarding the use of wheel stops (parking bumpers) in private parking lots within the City of Naperville

**DEPARTMENT:** Transportation, Engineering and Development

**SUBMITTED BY:** William J. Novack, Director of TED/City Engineer

#### **BOARD/COMMISSION REVIEW:**

NA

#### **BACKGROUND:**

At the October 1, 2019 City Council meeting two members of the Senior Task Force provided the attached brochure to the Mayor and City Council regarding wheel stops (parking bumpers). A member of the task force tripped and fell on one earlier that year and suffered serious injuries. The two members looked at many parking lots in Naperville and have suggested that the City pass an ordinance prohibiting the installation of wheel stops in all new construction in the City. City Council directed staff to research the issue and bring back a recommendation.

#### **DISCUSSION:**

The main purpose of a wheel stop is to serve as a physical signal to the driver that no additional forward movement is advised. They are usually installed at locations with sidewalk adjacent to the parking lot, so that cars do not pull too far forward and block the sidewalk. Some people have mistakenly thought that wheel stops provide protection to buildings or people behind the stop, but numerous accidents every year prove that wrong. Annually there are as many as 500 deaths and over 3,600 accidents in the United States because of vehicles crashing into outdoor dining, pedestrian areas and the interior of retail stores and other facilities. While wheel stops stop many vehicles, they do not stop all of them, especially with more and more SUV's on the road today.

While the City of Naperville does not prohibit the use of wheel stops, Section 1.7 of the City's Design Manual for Public Improvements discourages the use of wheel stops in accessible parking space loading areas due to the obstruction of the accessible route. Conducting a quick Google map survey of sites that have been developed since the recommendation against wheel stops has been in the Design Manual in 2002, we found that while most of them did not use the wheels stops, about 50 sites still did.

In a search of about ten local agencies we found that only the Village of Schaumburg prohibits the use of wheel stops. At the national level we found that the City of Malibu California prohibits the use of wheel stops. Malibu's prohibition is driven by safety and crash concerns, noting that vehicles go

over wheel stops and six-inch high sidewalks too often and crash into pedestrians and buildings. Malibu requires vehicle impact protection devices (bollards) if there are buildings or pedestrian ways adjacent to angled or perpendicular parking spaces. Staff is aware of instances in Naperville where cars have driven over wheel stops and/or six-inch high curbs or sidewalks and crashed into buildings and walls. Fortunately, no one was seriously injured or killed in any of our instances.

The main driver for this request to prohibit the installation of wheel stops is the tripping hazard that they pose to pedestrians. The member of the task force stated that the responding paramedics noted that she was not the first individual they had assisted after tripping on a wheel stop. Personally, I know an individual who has tripped twice on wheel stops and was seriously injured both times.

If the City prohibited the installation of wheel stops, then property owners would have to use bollards instead. Property owners would not be required to install bollards; they only would if they wish to provide additional guidance to drivers. In addition to not presenting a tripping hazard, some bollards are also capable of stopping a vehicle. The main detriments to bollards are costs, and the possibility that vehicles will not pull all the way into their spaces.

Wheel stops cost approximately \$50 each, while bollards can range from \$500 to \$750 each. The other issue is having cars pull all the way into the space. Most drivers will continue pulling forward until their car's wheel meet the wheel stop. On the other hand, very few drivers will pull forward until touching the bollard for fear of damaging their car's bumper. This could result in the back ends of cars sticking out in the drive aisle.

Staff believes there are two directions City Council can proceed with this. One is to direct staff to prepare ordinances banning the use of wheel stops on all new construction going forward. The other is to have staff emphasize the discouragement of and educate developers about the negative impacts of wheel stops. While it is presently discouraged in the Design Manual we believe that if it is discussed at concept meetings, preconstruction meetings and at final occupancy inspections, then the developers can make an educated decision instead of just installing what has been used for decades.

Additionally, the signage standards for accessible parking spaces were updated and changed last year. The position of the blue accessible parking space sign is no longer between the parking space and the loading zone; it is now in the middle of the parking space. This presents an opportunity to mount the sign in with a simple bollard. Given this change in standard and our emphasis on discouraging the wheel stops, staff believes we can greatly reduce the use of wheel stops going forward without putting a ban in place.

For these reasons, staff recommends City Council chooses the second option; directing staff to emphasize the discouragement of and educate developers about the negative impacts of wheel stops. This recommendation has been shared with the two individuals who brought this request forward. One supports this recommendation while the other prefers to see the wheel stops banned in new construction and at current locations throughout the City where they are adjacent to accessible parking spaces. The chairman of the Accessible Community Task Force also prefers the complete ban for new construction and removal at current locations adjacent to accessible parking spaces.

Staff prefers and recommends the "softer" approach of encouraging and educating. If City Council

supports that recommendation, staff can monitor the success rate going forward and if it is found that the wheel stops are still being installed then a more aggressive approach could be taken.

**FISCAL IMPACT:**

The cost to install a wheel stop is approximately \$50 each, while the cost to install a parking bollard can range from \$500 to \$750 each.