



MEMORANDUM

To: Mayor and City Council

From: Ken Griffin, P.E., Director of Engineering and Public Works

Date: December 12, 2017

Reference: Consideration of an Ordinance concerning Bicycle Signage

2030: Sustainable City Government, Goal 3
Excellent and Well-maintained City Infrastructure and Facilities

General Information:

- State Law regulates when a bicyclist can use a full lane
- The City posted signage in 2016 that bicyclists may use full lane on various streets
- Some of the signage does not meet the strict requirements of state law
- A briefing on this item was presented in Work Session at the August 22, 2017 Council meeting

Introduction:

At the August 22, 2017 Council meeting, information was provided concerning several streets where signage was placed which states bicycles “May Use Full Lane” (see Bicycle Travel Signage Exhibit). After placement of the signs in 2016, a placard was added that said “State Law”. The legality of the placard stating “State Law” has been questioned.

The State of Texas Transportation Code in Chapter 551 provides rules on when a bicycle can use the full lane. Specifically, the wording in the Transportation Code is:

Sec. 551.103. OPERATION ON ROADWAY.

(a) Except as provided by Subsection (b), a person operating a bicycle on a roadway who is moving slower than the other traffic on the roadway shall ride as near as practicable to the right curb or edge of the roadway, unless:

- (1) the person is passing another vehicle moving in the same direction;
- (2) the person is preparing to turn left at an intersection or onto a private road or driveway;

- (3) a condition on or of the roadway, including a fixed or moving object, parked or moving vehicle, pedestrian, animal, or surface hazard prevents the person from safely riding next to the right curb or edge of the roadway; or
- (4) the person is operating a bicycle in an outside lane that is:
- (A) less than 14 feet in width and does not have a designated bicycle lane adjacent to that lane; or
- (B) too narrow for a bicycle and a motor vehicle to safely travel side by side.
- (b) A person operating a bicycle on a one-way roadway with two or more marked traffic lanes may ride as near as practicable to the left curb or edge of the roadway.
- (c) Persons operating bicycles on a roadway may ride two abreast. Persons riding two abreast on a laned roadway shall ride in a single lane. Persons riding two abreast may not impede the normal and reasonable flow of traffic on the roadway. Persons may not ride more than two abreast unless they are riding on a part of a roadway set aside for the exclusive operation of bicycles.
- (d) Repealed by Acts 2001, 77th Leg., ch. 1085, Sec. 13, eff. Sept. 1, 2001.

Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995. Amended by Acts 2001, 77th Leg., ch. 1085, Sec. 10, 13, eff. Sept. 1, 2001.

Analysis:

The wording in the code sometimes causes confusion because people stop reading after paragraph (a) which basically states that bicycles should be as close as practicable to the curb if they are moving slower than the other traffic on the roadway. However, the state provides for four exceptions to that rule. Exceptions (1) and (2) are basic in that they just address how a bicycle can pass another vehicle or turn left. The proposed ordinance is an attempt to clarify how exemptions (3) and (4)(A) apply to Coppell..

Most of the streets are signed legally based on parked vehicles or the lane being less than 14 feet in width. See table.

Parking Allowed on Street (a)(3)	Outside Lane less than 14 feet in Width (a)(4)(A)
Parkway: Moore to MacArthur Bethel School: Moore to MacArthur Heartz: Sandy Lake to Bethel School	Royal: All Freeport: All Denton Tap: All Samuel: All MacArthur: All Belt Line: All Parkway: Coppell to Moore Sandy Lake: All Bethel: All Bethel School: Denton Tap to Moore Mockingbird: Sandy Lake to Villawood

However, there are still seven signed streets that are not covered by exceptions (1) – (4)(A). Those seven streets are discussed below.

Creekview: All / Southwestern: All / Coppell: All

These three streets are on the west side of Coppell and the outside lane ranges in width from 17 feet to 20 feet. However, the west side of Coppell is mostly industrial use which means a high number of commercial vehicles on the street. In reviewing Section 551.103. (a)(4)(A) of the Transportation Code, it is reasonable to assume that the logic behind the 14-foot lane width is as follows: typical passenger vehicle is 8 feet wide, with mirrors; the generally accepted buffer between a bicycle and a vehicle is 3 feet; and the amount of space that a bicyclist needs to ride in is 3 feet. This equates to 14 feet. However, commercial vehicles are wider than passenger vehicles. The width of the box on a commercial vehicle is 8.5 feet and the side mirrors extend beyond that so there is improved visibility for the truck driver.

Attached to this agenda item is an article from BikeTexas which states that the safe distance for commercial vehicles to pass bicyclists should be 6 feet. The article references the “Texas Commercial Motor Vehicle Drivers Handbook” which states in section 14.6.3.a. “You should always allow at least six feet to the left of the two-wheeled vehicle when you are passing”. The 6 feet is needed because of the aerodynamic effects of a commercial when it passes a bicycle.

It’s my opinion that enforcing a 14-foot-wide lane on the west side of the City does not meet the intent of Section 551.103. (a)(4)(B) which states that the lane should be wide enough for a vehicle to safely travel side by side with a bicycle. Based on the BikeTexas information and the Texas Commercial Motor Vehicle Drivers Handbook, an outside lane larger than 14 feet is needed in commercial areas.

My recommendation is that, by ordinance, these three streets should have signage that states that the bicyclist may use the full lane.

Heartz: Parkway to Sandy Lake / Moore: All / Mockingbird: Villawood to Belt Line

These three streets are wider streets because they are collectors on our Thoroughfare Plan. However, each of these streets also have an Elementary School located adjacent to them. It’s logical to think that with a school next to the street that younger, inexperienced bicyclists will be using the road to gain access to the school. Section 551.103. (a)(4)(B) of the Transportation Code states that an exception is allowed when the roadway is too narrow for the vehicle and the bicyclist to ride side by side. With younger bicyclists, it’s wise to allow more maneuver space to ride in and a wider buffer for vehicles. Also, because the streets are wider, vehicles tend to drive faster. The goal is to provide the safest route that we can for the bicyclists. Therefore, you need to allow the younger bicyclists the opportunity to use the full lane for their safety.

My recommendation is that, by ordinance, these three streets should have signage that states that the bicyclists may use the full lane.

Riverchase: All

This street is the only currently signed street that should have the signage removed. Riverchase currently has a striped lane on each side for bicyclists. Because of this, the signage should be removed.

Legal Review:

Legal prepared the attached proposed Ordinance.

Fiscal Impact:

n/a

Recommendation:

The Engineering Department recommends approval of the proposed Ordinance to add Section 8-5-6 to the General Traffic Regulations allowing bicyclists to use the entire lane on the referenced streets, when signed.