

# Memorandum

## City of Lawrence

### Planning & Development Services

TO: Thomas M. Markus, Lawrence City Manager  
Craig Weinaug, County Administrator  
CC Scott McCullough, Director, Planning and Development Services  
Chuck Soules, Director, Public Works  
FROM: Jessica Mortinger, Senior Transportation Planner  
Ashley Myers, Transportation Planner  
Nick Voss, Project Engineer  
DATE: October 19, 2016  
RE: Bicycle Signage Policy and Priority Locations

#### **Summary**

This document recommends the adoption of the following policy for future bicycle signage:

BIKES MAY USE FULL LANE and 3 FT PASSING signs should be installed, as part of roadway maintenance or reconstruction projects as budgets and funding is available.

#### **Background**

Bicyclists fare best when they operate like motor vehicles on the roadway because they are more visible and predictable. Kansas law says, "Every person riding a bicycle upon a roadway shall be granted all of the rights... applicable to the driver of a vehicle."<sup>1</sup> However, operating in a shared road environment comes with challenges because some motor vehicle operators and bicyclists are unsure of how to operate safely on the shared roadway. Furthermore, Kansas law changed in 2011 to make it explicit that drivers must give three feet when passing a bicyclist.<sup>2</sup>

Many people are not aware of how the rules of the road apply to bicyclists and that bicyclists have the right to use a full travel lane. Nor are they aware that passing too closely to bicyclists is extremely unsettling to bicyclists – three feet is the minimum buffer space between a bicyclist and a passing car. Uncertainty by bicyclists and motor vehicle operators can lead to crashes. In an effort to educate Lawrence residents, to create safer streets to all users, the Lawrence-Douglas County Bicycle Advisory Committee (BAC) is interested in installing educational signage throughout Lawrence-Douglas County.

---

<sup>1</sup> K.S.A. 8-1587 - "Every person riding a bicycle upon a roadway shall be granted **all of the rights** and shall be subject to all of the duties applicable to the driver of a vehicle by this act, except as otherwise provided in K.S.A. 8-1586 to 8-1592, inclusive, and except as to those provisions of this act which by their nature can have no application."

<sup>2</sup> K.S.A. 8-1516 (c) (1) – "The driver of a vehicle overtaking a bicycle proceeding in the same direction shall pass to the left thereof at a distance of not less than **three feet** and shall not again drive to the right side of the roadway until safely clear of the overtaken bicycle."

### **Signage Types**

The BAC recommends using signage as a way to educate the community about the rights and responsibilities of bicyclists and motorists. There are two sign types: BIKES MAY USE FULL LANE and 3 FT PASSING.

The U.S. Department of Transportation Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices has a standard BIKES MAY USE FULL LANE sign (as shown in Figure 1). Kansas (like many other states) enacted laws that define the minimum 3 feet offset for vehicles to pass bicyclists. However, there is no uniform 3 FT PASSING sign style and some signs can send the wrong message. FHWA is currently testing which 3 FT PASSING sign style sends the correct message. This testing should be concluded by late 2016. After a standard 3 FT PASSING sign is determined, they can be installed in the community.

**Figure 1: Example Signs**



### **Recommended Bicycle Signage Policy**

The following bicycle sign types should be installed at priority locations as part of a roadway maintenance or reconstruction or as funding becomes available.

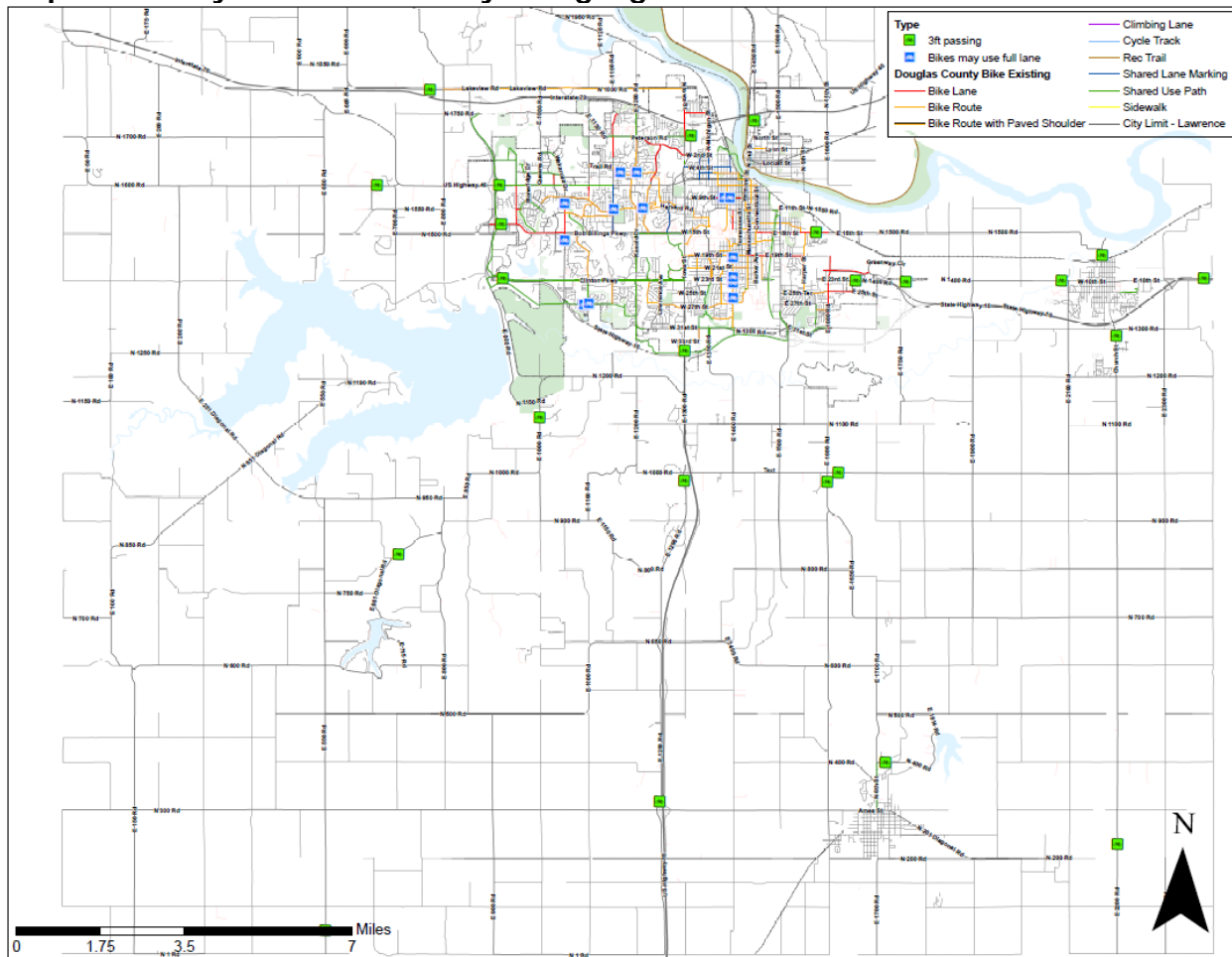
**BIKES MAY USE FULL LANE** – This sign is appropriate for installation when roads are reconstructed and/or traffic calming is installed and there is not a designated bikeway facility or the travel lane is not wide enough for a motorist to pass a cyclist providing the minimum buffer of three feet. For example, traffic calming elements that bottleneck lanes or provide midblock islands for pedestrians are locations where bicyclists are safest if they use the full travel lane. The BIKES MAY USE FULL LANE sign is recommended, because drivers may not provide comfortable clearance when passing. They may also be installed where Sharrows are located connecting currently discontinuous segments of bike lanes.

**3 FT PASSING** – This sign is appropriate for arterial and collector streets, which serve as gateways into the community, as well as county roads where bicyclists must ride on the shoulder or in the roadway. This sign reminds and informs motorists that three feet of space must be given when passing bicyclists.

## Signage Priority Locations

The BAC has developed priority locations for initial installation of these sign types, approved by the BAC on July 18, 2016. See Map 1 to view these locations. These locations are not an exclusive list for sign installation; however, based on the proposed policy they serve as the priority locations for near term signage installation, and the BAC recommends installing as funding is available.

**Map 1: Priority Locations for Bicycle Signage**



Tables 1 and 2 indicate what type of signage has been prioritized for specific locations.

**Table 1: City of Lawrence Priority Sign Locations**

Location	Type of signage (BIKES MAY USE FULL LANE or 3 FT PASSING)
23rd St., east of O'Connell Rd.	3 FT PASSING
E. 15th St., east of Lindenwood Ln.	3 FT PASSING

N. 2nd St., south of KTA Entrance Rd.	3 FT PASSING
McDonald Dr., south of turnpike toll booth	3 FT PASSING
6th St., east of K-10	3 FT PASSING
Bob Billings Pkwy, east of K-10	3 FT PASSING
Clinton Pkwy, west of Lake Pointe Dr.	3 FT PASSING
N. 1200 Rd., west of E. 1067 Rd.	3 FT PASSING
Iowa St., north of K-10	3 FT PASSING
Louisiana St., south of 19th St.	BIKES MAY USE FULL LANE
Louisiana St., north of 23rd St.	BIKES MAY USE FULL LANE
Louisiana St., south of 23rd St.	BIKES MAY USE FULL LANE
Louisiana St., north of 27th St.	BIKES MAY USE FULL LANE
9th St. and Illinois	BIKES MAY USE FULL LANE
9th St. and Indiana	BIKES MAY USE FULL LANE
Trail Rd. and Sierra Dr.	BIKES MAY USE FULL LANE
Trail Rd. and Frontier Rd.	BIKES MAY USE FULL LANE
Wakarusa Dr., south of Harvard Rd.	BIKES MAY USE FULL LANE
Wakarusa Dr., south of Bob Billings Pkwy	BIKES MAY USE FULL LANE
Harvard Rd., east of Monterey Way	BIKES MAY USE FULL LANE
Harvard Rd., west of Jana Ct.	BIKES MAY USE FULL LANE
W. 27th St. and Wildflower Dr.	BIKES MAY USE FULL LANE
W. 27th St., east of Inverness Dr.	BIKES MAY USE FULL LANE

**Table 2: Douglas County Priority Sign Locations**

<b>Location</b>	<b>Type of signage (BIKES MAY USE FULL LANE or 3 FT PASSING)</b>
E. 550 Rd., near Douglas County southern boundary	3 FT PASSING
Route 1045, north of N 300 Rd. (2)	3 FT PASSING
State Lake Rd. and Signal Lake Ct.	3 FT PASSING
E. 2200 Rd., north of N. 200 Rd.	3 FT PASSING
E. 661 Diagonal Rd., north of Lone Star Lake (2)	3 FT PASSING
E. 1000 Rd., and N. 1110 Rd. (2)	3 FT PASSING
E. 1296 Rd., south of N 1000 Rd. (2)	3 FT PASSING
E. 1600 Rd., south of N 1000 Rd. (2)	3 FT PASSING
N. 1000 Rd., east of E. 1600 Rd. (2)	3 FT PASSING
Church St., south of K-10	3 FT PASSING
N. 1400 Rd., east of Eudora	3 FT PASSING
E. 2200 Rd., north of Eudora	3 FT PASSING
N. 1400 Rd., west of Eudora	3 FT PASSING
E. 23 <sup>rd</sup> St., east of Noria Rd.	3 FT PASSING
N. 1800 Rd., west of Farmer's Turnpike (2)	3 FT PASSING
N. 1600 Rd., east of E. 650 Rd.	3 FT PASSING

### **Funding Needed**

The amount of funding needed for the BAC identified priority locations is displayed in Table 2.

**Table 2: Funding Needed for Priority Location Signs**

City/County	Sign type	Cost Per	Number	Total Cost
City	BIKES MAY USE FULL LANE	\$600	14	\$ 8,400
	3 FT PASSING	\$600	9	\$ 5,400
County	3 FT PASSING	\$600	23	\$ 13,800
<b>Grand Total Cost</b>				<b>\$ 27,600</b>

\$13,800 is needed to install signs at priority signage locations in Lawrence, and \$27,600 is needed to install signs at all priority locations throughout the city and county.

### **Next Steps**

Adopt this signage policy and incorporate it and the priority signage locations into the Countywide Bikeway Plan.

Pursue installation of signage as recommended by the proposed policy, beginning at priority sign locations, as part of road project budgets or as funding is available.