

## House Bill 10-1147 Pro/Con Analysis

For the Health District of Northern Larimer County Board of Directors

February 23, 2010

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<b>Bill Title:</b>	Concerning Safer Streets for Nonmotorized Wheeled Transportation
<b>Issue Summary:</b>	Requires that minors wear a protective helmet when operating a nonmotorized, wheeled vehicle on public streets and premises open to the public. Codifies an existing directive from the Department of Transportation that calls for outreach and collaboration between appropriate agencies to develop an educational curriculum that teaches street safety to minors.
<b>Sponsors:</b>	Representative Kefalas and Senator Bacon
<b>Bill History:</b>	01/20/2010 Introduced In House - Assigned to Transportation & Energy
<b>Date of Analysis:</b>	February 16, 2010
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### Bill Summary

House Bill 1147 requires all minors aged 2-18 to wear a helmet while riding bicycles, skateboards, and other nonmotorized wheeled vehicles on a public street or in a public place. It codifies a standing Department of Transportation directive, requiring collaborative efforts to teach children about street safety and ways to prevent injury and while operating such vehicles. The bill classifies violation of the helmet requirement as an “unclassified traffic infraction,” and limits enforcement to stopping the violator (and accompanying adult), informing them of the violation, and providing an informational card that explains the risks of not wearing a helmet and identifies locations to obtain a low-cost or free helmet, if needed.

The bill requires the Department of Transportation and its subdivisions to incorporate “transportation infrastructure” that accommodates bicycle and pedestrian use in the planning and construction of future transportation projects.

### Background

Almost 72% of all Colorado children report spending some of their time riding a bicycle, skateboarding, rollerblading, or riding a scooter.<sup>1</sup> These activities often take place in settings with automobile traffic or in areas that lend themselves to an increased potential for serious body and head injuries—such as asphalt roads and concrete skate parks—making safety a prime concern for kids who participate.

Colorado currently has laws relating to bicycle usage on the books; however, these laws speak to proper traffic operations, for both cyclists and motorists, and do not address safety equipment, education, or infrastructure planning—nor do these laws address safety equipment for other wheeled sports (Colorado is one of 29 states with no statewide bicycle helmet law). While there is a current directive in place from the Colorado Department of Transportation that calls for integrating the needs of bicyclists and pedestrians in the planning, design, and operation of transportation facilities, this directive is not codified as state law.

### Wearing Safety Helmets

Head injury is the leading cause of death or serious disability resulting from wheeled sports activity. Colorado averages roughly 11 bicycle deaths, and 540 hospitalizations due to bicycle accidents, each year. Of all age groups, children 5-14 have the highest rate of hospitalizations, with almost 33% of those due to a brain injury.<sup>2</sup> Experts agree that wearing an appropriate helmet is the best protection against traumatic brain injury when participating in a wheeled sport.

According to the National Conference of State Legislatures, bicycle helmets are 85% - 88% effective in reducing head and brain injuries in all types of bicycle crashes, yet only 25% of all riders wear helmets. In Colorado, roughly 49% of

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<sup>1</sup> Colorado Department of Public Health and Environment. Injury Epidemiology Brief. Use of helmets while bicycling or participating in other wheeled sports. August, 2006

<sup>2</sup> Ibid.

children, ages 5-14, report always wearing a helmet, with the majority of those children being in the 5-8 year old range. Currently, 21 states and the District of Columbia have statewide bicycle helmet laws, most of which make wearing a safety helmet mandatory for children under age 15.<sup>3</sup> In addition, many local governments have enacted their own ordinances, increasing the age limit of minors who are required to wear safety helmets.

Empirical studies have found a strong relationship between mandatory helmet laws and increased helmet usage. Pre and post law studies in both Georgia and Oregon found that enacting mandatory helmet laws in those states led to an increase in usage of almost 19% and 25%, respectively; and in California, bicycle helmet legislation was credited with an 18% reduction in the proportion of traumatic brain injuries among young riders.<sup>4</sup> Additionally, one national study found that mandatory, statewide helmet laws led to an increase in helmet usage of around 20%. That same study points out that “helmet laws are more likely to be effective when combined with comprehensive education and outreach programs.”<sup>5</sup>

Other studies have noted the following:

- Non-helmeted riders are 14 times more likely to be involved in a fatal crash than helmeted riders.<sup>6</sup>
- More than 40 percent of all bicycle-related deaths due to head injuries and approximately three-fourths of all bicycle-related head injuries occur among children ages 14 and under.<sup>7</sup>
- Within five years of passage of New Jersey’s mandatory helmet law, bicycle fatalities in that state, for children 13 and under, decreased by 60%.<sup>8</sup>
- Every dollar spent on a bike helmet saves society \$30 in direct medical costs and other costs to society.<sup>9</sup>

### **Traffic Safety**

While wearing proper safety helmets is a prime component of HB 1147, the bill also calls for collaborative efforts among state agencies, school districts, and nonprofit organizations to create a comprehensive educational curriculum for children regarding the safe use of streets and public premises, including hiking and biking trails. This curriculum will be made available to schools under the auspices of the Safe Routes to School Program.

According to the National Highway Traffic Safety Administration, motor vehicle accidents are the leading cause of death among children 3-6 and 8-14 years old, and almost 25% of those fatalities were either pedestrians or “pedalcyclists.”<sup>10</sup> There is a dearth of information on the effectiveness of traffic safety education programs in reducing accidents, however experts from the Centers for Disease Control call for education programs that “promote the development of [traffic] skills and their application in a variety of traffic contexts,” and notes that “it is likely that a combination of educational and environmental measures will be needed [to increase safety].”<sup>11</sup>

Findings from other studies include:

- Among children ages 14 and under, more than 80 percent of bicycle-related fatalities are associated with the bicyclist’s behavior, including riding into a street without stopping, turning left or swerving into traffic that is coming from behind, running a stop sign and riding against the flow of traffic.<sup>12</sup>

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<sup>3</sup> Ibid.

<sup>4</sup> Lee, B.H., Etal. 2005. Bicycle safety helmet legislation and bicycle-related non-fatal injuries in California. *Accident and Analysis Prevention*. 37, 93-102. Quoted in CDPH, Injury Epidemiology Brief, August, 2006.

<sup>5</sup> Rogers, G.B. 2002. Effects of state helmet laws on bicycle helmet use by children and adolescents. *Injury Prevention*. 2002:8. 42-46. Includes Georgia and Oregon statistics.

<sup>6</sup> Bicycle Safety Institute. Helmet related statistics, 2009. <http://www.bhsi.org/stats.htm>

<sup>7</sup> Safe Kids USA. Bike injury fact sheet, 2004. [http://www.usa.safekids.org/tier3\\_cd.cfm?folder\\_id=540&content\\_item\\_id=1010](http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010)

<sup>8</sup> Division of Highway Traffic Safety. New Jersey’s bike helmet law reached 5-year mark. [press release] (NJ): New Jersey Department of Laws and Public Safety, 1997 July 16. Quoted in Safe Kids, Pierce County, Washington.

<http://safekidspiercecounty.health.officelive.com/Documents/Wheeled%20Sports%20Fact%20Sheet.pdf>

<sup>9</sup> Safe Kids USA. Bike injury fact sheet, 2004. [http://www.usa.safekids.org/tier3\\_cd.cfm?folder\\_id=540&content\\_item\\_id=1010](http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010)

<sup>10</sup> National Highway Traffic Safety Administration. Traffic safety facts. 2007.

<sup>11</sup> Schrieber, R.A., and M.E. Vegega. 2002. Reducing childhood pedestrian injuries. *Injury Prevention*. Vol 8. Sup. 1. 2002.

<sup>12</sup> Safe Kids USA. Bike injury fact sheet, 2004. [http://www.usa.safekids.org/tier3\\_cd.cfm?folder\\_id=540&content\\_item\\_id=1010](http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010)

- It is estimated that collisions with motor vehicles account for nearly 90 percent of all bicycle-related deaths and 10 percent of all nonfatal bicycle-related injuries.<sup>13</sup>
- Experience has shown that reliance on individuals or organizations visiting schools to give talks on road safety are not effective on their own, and that the most effective and sustainable development of positive attitudes towards road safety are best achieved by inclusion in the core curriculum, either as a compulsory subject in its own right or as a cross-curricular theme.<sup>14</sup>

### **Why is this issue important?**

Traumatic brain injury (TBI) is a major cause of both death and disability among children.<sup>15</sup> In addition to the emotional and social impact such a tragedy may have, the economic implications of TBI can be enormous. It has been estimated that TBI survivors can pay as much as \$4 million in their lifetime for medical and health care services, due to their injuries<sup>16</sup> and that if 85% of all children wore bicycle helmets in a single year, the lifetime health care savings—from brain injuries prevented in that one year—would be as high as \$142 million.<sup>17</sup>

While wearing helmets relates directly to preventing TBI, other bicycle safety practices may have profound economic effects, as well. Nationally, the total annual cost of traffic-related bicyclist death and injury among children ages 14 and under is more than \$2.2 billion.<sup>18</sup> Studies clearly indicate that behavior is a major factor in bicycle safety, and policy designed to influence that behavior deserves debate and close consideration.

### **Reasons to support bill:**

- Studies show a clear link between wearing safety helmets when participating in wheeled sports and reducing fatalities in children. Studies also indicate a clear link between mandatory helmet laws and helmet usage. This bill, at a relatively low cost, could be instrumental in saving children’s lives and keeping them from serious injury.
- Traumatic brain injury has significant long-term emotional and economic costs for families and society. Children are especially susceptible to TBI when riding a bicycle or when participating in wheeled sports. Mandatory helmet laws have proven to be effective, in other states, in curtailing head injuries have been directly linked to major decreases in bicycle fatalities among children.
- Supporters might argue that a mandatory helmet law, even though there is not penalty for noncompliance, is part of creating a cultural norm that expects children will wear helmets. Additionally, as studies underscore the connection between bicyclist behavior and bicycle fatalities, supporters might argue the need for bicycle safety curriculum in our schools as a way of creating a cultural norm of safety for children who participate in these activities.

### **Reasons to oppose bill:**

- Opponents might argue that, because this bill allows for no real penalties through enforcement, it will do very little to change the behavior of children—especially young teenagers—when they ride their bicycles, skateboards, or other wheeled vehicles (although evidence in Georgia and Oregon shows increases in helmet usage of between 19% and 25% with mandatory helmet laws).
- It could be argued that the educational requirements of this bill place too great a burden on schools that are already struggling to find enough time and funding to meet the educational needs of their students.

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<sup>13</sup> Ibid.

<sup>14</sup> World Bank. Roads and highway safety: road safety. <http://www.worldbank.org/transport/roads/safety.htm#childrens>

<sup>15</sup> Think First National Injury Prevention Foundation. Traumatic Brain Injury Fact Sheet. <http://www.thinkfirst.org/Documents/FastFacts/BW/Traumatic%20Brain%20Injury.pdf>

<sup>16</sup> Ibid.

<sup>17</sup> Safe Kids USA. Bike injury fact sheet, 2004. [http://www.usa.safekids.org/tier3\\_cd.cfm?folder\\_id=540&content\\_item\\_id=1010](http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010)

<sup>18</sup> Ibid.

- Opponents of the bill might argue that requiring children to wear a helmet is a decision best left up to parents who are ultimately responsible for their children's safety.
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**About this Analysis**

This analysis was prepared by Health District of Northern Larimer County staff to assist the Health District Board of Directors in determining whether to take an official stand on various health-related issues. Analyses are based on bills or issues at the time of their consideration by the Board and are accurate to the best of staff knowledge. It is suggested that people check to see that a bill has not changed during the course of a legislative session by visiting the Colorado General Assembly web page at [www.state.co.us/gov\\_dir/stateleg.html](http://www.state.co.us/gov_dir/stateleg.html). To see whether the Health District Board of Directors took a position on this or other policy issues, please visit [www.healthdistrict.org/policy](http://www.healthdistrict.org/policy).

**About the Health District**

The Health District is a special district of the northern two-thirds of Larimer County, Colorado, supported by local property tax dollars and governed by a publicly elected five-member board. The Health District provides medical, mental health, dental, preventive and health planning services to the communities it serves.

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