

1.COMMITTEE ON LEGISLATIVE RESEARCH
OVERSIGHT DIVISION

FISCAL NOTE

L.R. No.: 1460-01
Bill No.: SB 323
Subject: Insurance - General; Licenses - Motor Vehicle; Motor Vehicles; Roads and Highways; Transportation
Type: Original
Date: February 28, 2017

Bill Summary: This proposal specifies when persons operating or riding a motorcycle or motortricycle must wear protective headgear.

FISCAL SUMMARY

| ESTIMATED NET EFFECT ON GENERAL REVENUE FUND | | | |
|--|------------|------------|------------|
| FUND AFFECTED | FY 2018 | FY 2019 | FY 2020 |
| | | | |
| Total Estimated Net Effect on General Revenue | \$0 | \$0 | \$0 |

| ESTIMATED NET EFFECT ON OTHER STATE FUNDS | | | |
|---|------------|------------|------------|
| FUND AFFECTED | FY 2018 | FY 2019 | FY 2020 |
| | | | |
| Total Estimated Net Effect on <u>Other</u> State Funds | \$0 | \$0 | \$0 |

Numbers within parentheses: () indicate costs or losses.

This fiscal note contains 11 pages.

| ESTIMATED NET EFFECT ON FEDERAL FUNDS | | | |
|---|----------------|----------------|----------------|
| FUND AFFECTED | FY 2018 | FY 2019 | FY 2020 |
| | | | |
| | | | |
| Total Estimated Net Effect on <u>All</u> Federal Funds | \$0 | \$0 | \$0 |

| ESTIMATED NET EFFECT ON FULL TIME EQUIVALENT (FTE) | | | |
|---|----------------|----------------|----------------|
| FUND AFFECTED | FY 2018 | FY 2019 | FY 2020 |
| | | | |
| | | | |
| Total Estimated Net Effect on FTE | 0 | 0 | 0 |

Estimated Net Effect (expenditures or reduced revenues) expected to exceed \$100,000 in any of the three fiscal years after implementation of the act.

| ESTIMATED NET EFFECT ON LOCAL FUNDS | | | |
|--|----------------|----------------|----------------|
| FUND AFFECTED | FY 2018 | FY 2019 | FY 2020 |
| Local Government | \$0 | \$0 | \$0 |

FISCAL ANALYSIS

ASSUMPTION

Officials from the **Department of Social Services - MO HealthNet Division (MHD)** state currently, all users of motorcycles and motortricycles are required to wear protective headgear when the vehicle is in motion. This proposal clarifies that operators, riders, or passengers under the age of 18 are still required to wear protective headgear. It further requires any operator age 18 or older to wear protective headgear if they have been issued an instruction permit.

Section 302.026 is added to authorize individuals age 18 or older to operate a motorcycle or motortricycle without wearing protective headgear if he/she can show proof of the following:

- 1) "first-party insurance";
- 2) maintained proof of financial responsibility;
- 3) coverage by a health insurance policy, person injury protections insurance policy, or rider, or other form of insurance providing first-party medical benefits of at least \$1,000,000.

MHD assumes the medical benefits provided under MO HealthNet are not considered "first-party insurance" and do not meet the requirements as specified in the proposal to operate a motorcycle without a helmet. MHD assumes the below stated costs would result from individuals who are privately insured, but sustain severe traumatic brain injuries (TBI) and are unable to meet the higher premiums charged by private health insurance plans or are forced to spend down resources and become eligible for Medicaid because of their disability.

The Missouri State Highway Patrol reported 1,979 non-fatal injured persons resulting from motorcycle crashes in 2014. MHD assumes 95% of the injured persons were age 18 or older ($1979 * 95\% = 1,880.1$) and all individuals were meeting the current state law requiring helmet use. Based on crash statistics from the National Highway Transportation and Safety Administration, 4.7% of helmeted motorcyclists involved in a crash suffered from severe TBI whereas 7.3% of un-helmeted motorcyclists suffered from severe TBI. Therefore, MHD assumes 88.4 persons sustained severe TBI injuries in 2014 as a result of motorcycle crashes while wearing helmets ($1,880.1 * 4.7\%$). This number would increase to 137.2 individuals with severe TBI injuries if helmets were no longer required under state law ($1,880.1 * 7.3\%$). Therefore, it is estimated that 48.8 individuals will sustain severe TBI as a result of this legislation ($137.2 - 88.4$).

ASSUMPTION (continued)

MHD assumes that of these 48.8 individuals, 30% will ultimately spend down their resources and qualify for Medicaid, and will be classified as totally and permanently disabled (PTD). MHD assumes that some individuals would qualify more quickly than others; therefore, MHD assumes that of those individuals with TBIs occurring in the first year after implementation of this legislation, 15% would qualify for Medicaid; 22.5% would qualify within the second year, and 30% would ultimately qualify within three years. Based on these assumptions, MHD assumes 7.3 new PTD in FY 2018, 18.3 in FY 2019, and 32.9 in FY 2020. In addition, MHD assumes that TBIs will be life-long injuries; therefore, the number of individuals being served under Medicaid will continue to compound.

Based on FY 2016 annual Medicaid expenditures for a recipient with PTD trended annually by a 4.1% inflationary factor, MHD estimates an annual first year cost of \$16,885.48 per person for a total first year cost of \$123,264 in FY 2018.

MHD further assumes that of the 48.8 individuals annually sustaining severe TBI as a result of this legislation, 8.54% (based on current Medicaid recipients ages 18-64 divided by the general Missouri population ages 18-64) will be Medicaid recipients at the time of the accident, or 4.2 individuals.

Based on a 2013 report issued by the Arkansas Spinal Cord Commission, the average acute care Medicaid costs for TBI was \$15,783 (average from 2007-2012). This initial cost was inflated by a three year average Hospital Market Basket Trend from SFY 2010 through SFY 2017. Therefore, the initial hospitalization cost is estimated to be \$19,563 per person in FY 2018 or \$82,164.60 (\$19,563 * 4.2 individuals).

The one-time acute care costs are in addition to the annual cost to care for a person with TBI. The average cost for a custodial parent (based on FY 2016 expenditures) is \$5,558.74. MHD assumes annual expenditures will increase to the PTD level for an annual increase of \$10,022.86 per person sustaining a TBI as a result of this proposal. This amount is trended annually by 4.1%. MHD estimates the annual costs for caring for an individual with TBI will be \$45,618.72 (\$10,861.60* 4.2 individuals each year). The total annual cost for individuals who are Medicaid recipients at the time of the accident is \$127,783.32 (\$82,164.60 + \$45,618.72). MHD assumes that TBIs will be life-long injuries; therefore, the number of individuals being served under Medicaid will continue to compound.

This cost reflects expenditures incurred by the Division of MO HealthNet. Any Medicaid services incurred by the Department of Health and Senior Services (DHSS) and the Department of Mental Health (DMH) will be included in their responses.

ASSUMPTION (continued)

MHD estimates the total impact as follows:

FY 2018: Total - \$251,047; GR - \$89,724; Federal - \$161,323
FY 2019: Total - \$501,416; GR - \$179,207; Federal - \$322,209
FY 2020: Total - \$837,777; GR - \$299,422; Federal - \$538,355

Each year, an additional 14.6 privately insured individuals would gradually become eligible for Medicaid as a result of a severe head injury sustained while riding a motorcycle without a helmet. 4.2 Medicaid recipients would sustain severe head injuries annually while riding a motorcycle without a helmet.

Officials from the **Department of Mental Health (DMH)** assume riders 18-21 years of age would be in compliance with section 302.026.1 at the time of a motorcycle crash resulting in TBI, and would carry the proposed minimum \$1,000,000 of first-party insurance coverage. Given the nature of treating TBI in a hospital setting and current inpatient healthcare costs, we assume this amount of coverage would serve to defray an individual's initial medical bills, and would therefore not serve as a mitigating eligibility factor for placement in a DMH waiver program.

Crash Rates

The MO State Highway Patrol reports 1,683 personal injury motorcycle crashes in 2005, injuring 1,978 people. By 2012 those figures had risen to 2,065 and 2,404 respectively (MO State Highway Patrol, 2014). The State's eight-year average for motorcycle crashes between 2005 and 2012 is 1,854 and 2,165 for persons injured (Missouri State Highway Patrol, 2014). In 2011 and 2012, the number of crashes increased 9% over each preceding year.

Based on available data, projections indicate Missouri will have experienced an average of 2,148 motorcycle crash injuries per year between 2016 and 2020.

State Demographics

The United States Census Bureau estimates that in 2013 the percentage of persons aged 18 to 21 years old residing in Missouri comprised 6% of the total state population, or 336,435 persons out of 6,044,171 (US Census Bureau, 2014).

Head Injury Rate of Occurrence

The federal Centers for Disease Control reports an incidence rate for head injury requiring hospitalization of 81.2 per 100,000 people aged 16 to 22 (Centers for Disease Control, 2014).

ASSUMPTION (continued)

Comparing this data to the census data previously discussed yields an estimate of 273 persons aged 18 to 21 per year in Missouri who will experience a head injury requiring hospitalization (persons aged 18 to 21 in MO / CDC unit of measurement x CDC incidence rate)

DD Community Placements & Cost Estimate

In 2015, the Division of DD admitted 24 individuals with head injuries.

DD estimates an average cost per day of \$334 (\$121,910/yr.) for community placement services. The state share of this cost in FY 2017 is \$44,829 ($\$121,910 \times 36.772\%$ state share = \$44,829).

Estimated Annual Fiscal Impact

Assuming a 15% rate of TBI incidence due to motorcycle crashes for each year between 2017 and 2021 for individuals aged 18 to 21 in Missouri, a total of 95 additional individuals or 19 people per year could become eligible for DD waiver services and DBH services.

Utilizing the Division of DD's cost estimates for FY 2017, this represents an expected increased cost to the DMH of \$851,751 of general revenue per year ($\$44,829 \times 19 = \$851,751$).

Data from the Missouri State Highway Patrol, United States Census Bureau, Centers for Disease Control, and fiscal data from the Division of Developmental Disabilities were utilized to arrive at an estimated fiscal impact.

Officials from the **Department of Health and Senior Services (DHSS)** assume the following regarding this proposal:

Section 302.020.2 specifies that only individuals under eighteen years of age, or those 18 and older with an instruction permit, must wear protective headgear at all times when operating or riding as a passenger on any motorcycle or motortricycle.

Section 302.026 adds that any qualified motorcycle operator who is eighteen years of age or older may operate a motorcycle or motortricycle without wearing protective headgear if he or she has first-party insurance coverage with a minimum of one million dollars for injuries incurred as a result of an accident while operating a motorcycle or motortricycle.

ASSUMPTION (continued)

DHSS officials state changing the helmet law to only require any person under eighteen years of age, or who is eighteen and older with a motorcycle instruction permit, to wear protective headgear at all times when operating or riding as a passenger on any motorcycle or motortricycle will increase the number of individuals incurring a traumatic brain injury, thus there will be an increase in participants requesting services through the following programs: Adult Brain Injury (ABI), Children and Youth with Special Health Care Needs (CYSHCN), Healthy Children and Youth (HCY), and Medically Fragile Adult Waiver (MFAW).

Based on the most recently published motorcycle crash statistics by the Missouri State Highway Patrol, there were 1,734 motorcycle crashes that resulted in personal injuries in 2014. Of these 1,734 motorcycle crashes, based on population estimates it is estimated that 10 percent of those crashes would involve persons age 18 to 20 and 80 percent would involve persons age 21 and older. According to a National Occupant Protection Use Survey, it is also estimated that half of those persons would not be wearing a helmet if this proposed legislation is passed, resulting in 87 (age 18-20) and 694 (age 21 and over) individuals involved in a motorcycle crash ($1,734 \times .10 \times .50 = 87$ and $1,734 \times .80 \times .50 = 694$). Based on assessment of other states, if 50 percent of those individuals experience a traumatic brain injury (TBI), and 50 percent of those with a TBI are eligible for program enrollments, there would be 22 additional participants dually enrolled in CYSHCN and HCY ($87 \times .50 \times .50 = 22$), with 50 percent (or 11 participants) of the HCY enrollments aging out into the MFAW program in subsequent years ($22 \times .50 = 11$), and 174 additional enrollments to the ABI Program per year ($694 \times .50 \times .50 = 174$).

The average cost per participant for CYSHCN is \$833.75 per year. The total needed for CYSHCN services would be \$18,342.50 ($\833.75×22 participants) per year.

Both HCY and MFAW are partially federally funded at 63.228 percent federal and 36.772 percent state Medicaid match. The average cost per participant to provide services through the HCY program is \$24,970.82 per year. The total needed for HCY services would be \$549,358.04 ($\$24,970.82 \times 22$ participants), funded as \$347,348.10 by federal and \$202,009.94 by the state.

The average cost per participant to provide services through the MFAW program is \$107,521.08 per year. The total needed for services through the MFAW program would be \$1,182,731.88 (11 MFAW participants \times $\$107,521.08$), funded as \$747,817.71 by federal and \$434,914.17 by the state.

The current average cost per participant to provide rehabilitation services through the ABI Program is \$3,653 per year. The total needed for rehabilitation services would be \$635,622 ($\$3,653 \times 174$ participants).

ASSUMPTION (continued)

The increase in participants would also require the ABI Program to add four additional service coordinators, based on the fact that currently there is an average of 40 participants per service coordinator caseload. Service coordinators provide case management for participants enrolled in the ABI program and are contracted through local public health agencies (LPHA) at a cost of \$61,800 per service coordinator. The total needed for all four additional service coordinators would be \$247,200 (\$61,800 x 4 service coordinators).

Participation in the ABI Program is subject to available funding and without additional funding any potential new participants will be added to a waiting list for rehabilitation services. In Fiscal Year 2016 there was an average of 116 Missourians on the ABI Program wait-list, with a wait time of over 305 days before rehabilitation services were provided through the program. It is clear that additional program participants would result in the ABI Program requesting additional funding for the program.

Given that CYSHCN and HCY participants age out of the programs by age 21, it is estimated that the influx of these two programs' new participants will be offset each year by the outflux of the programs' participants. The impact to the ABI and MFAW Program will be additional participants each year (additional annual impact plus the impact from the previous year) since the average length of enrollment in the program is greater than the three years estimated in this fiscal note. Given that one of the eligibility requirements for the MFAW Program is that the program participant ages out from the HCY Program, the additional impact on MFAW will not be experienced until Fiscal Year 2019.

Officials from the **Department of Revenue (DOR)** state the following regarding this proposal:

§302.020.02

This section adds language for every person less than eighteen years of age who is operating or is a passenger on a motorcycle or motortricycle to wear protective headgear at all times. Any person eighteen years of age and older that is operating a motorcycle or motortricycle who has been issued an instructional permit shall wear protective head gear at all times.

§302.026

This section adds language for any motorcycle operator eighteen years of age or older may operate a motorcycle or motortricycle without wearing protective headgear if he or she has medical insurance coverage with benefits with a minimum amount of one million dollars for injuries that occur from an accident while operating a motorcycle or motortricycle. This is in addition to the requirement of maintaining financial responsibility accordance with Chapter 303.

ASSUMPTION (continued)

This coverage will be required to be presented on request from any authorized law enforcement officer.

Administrative Impact

Driver License Bureau (DLB) FY 2018

The website will need to be updated with the new motorcycle guidelines. The Missouri Driver Guide and Missouri Motorcycle Manual will be updated before the next order is placed.

Revenue Band Manager will be required to:

- Draft and review website changes;
- Draft and review Missouri Driver Guide; and
- Draft and review Missouri Motorcycle Manual.

Revenue Band Manager I - 40hrs @ \$25.39 per hour = \$ 1,016

Update web pages

Administrative Analyst III - 40hrs @ \$22.59 per hour = \$904

Oversight assumes DOR is provided with core funding to handle a certain amount of activity each year. Oversight assumes DOR could absorb the costs related to this proposal.

Officials from the **Department of Public Safety - Missouri Highway Patrol, Department of Transportation, Office of Prosecution Services, Department of Insurance, Financial Institutions and Professional Registration, Department of Corrections and State Public Defender's Office** each assume the proposal will have no fiscal impact on their respective organizations.

Oversight assumes some people 18 and over could choose not to wear protective headgear as a result of this proposal. Accordingly, there may be an increase in injuries or the severity of injuries to motorcyclists not wearing protective headgear which may **indirectly** result in increased costs to the state. Oversight assumes no **direct** fiscal impact to state and local governments from the protective headgear exemption.

Oversight also assumes the Department of Health and Senior Services and the Department of Mental Health will request increased appropriations depending on the actual increases in TBI paid for by the state.

| <u>FISCAL IMPACT - State Government</u> | FY 2018 (10 Mo.) | FY 2019 | FY 2020 |
|---|---------------------|------------|------------|
| | <u>\$0</u> | <u>\$0</u> | <u>\$0</u> |
| <u>FISCAL IMPACT - Local Government</u> | FY 2018 (10 Mo.) | FY 2019 | FY 2020 |
| | <u>\$0</u> | <u>\$0</u> | <u>\$0</u> |

FISCAL IMPACT - Small Business

No direct fiscal impact to small businesses would be expected as a result of this proposal.

FISCAL DESCRIPTION

Currently, every person operating or riding a motorcycle or motortricycle is required to wear protective headgear.

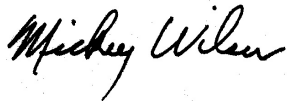
This act provides that persons under the age of 18 who are operating or riding as a passenger on a motorcycle or motortricycle shall wear a helmet when the vehicle is in motion. Similarly, a person who is 18 or older, is operating a motorcycle or motortricycle, and who has been issued an instruction permit shall wear a helmet when the vehicle is in motion.

This act also provides that qualified operators who are 18 or older may operate a motorcycle or motortricycle without a helmet if he or she has medical payment insurance coverage of at least \$1 million. Proof of such coverage shall be provided on request of law enforcement by showing a copy of the qualified operator's insurance card.

This legislation is not federally mandated, would not duplicate any other program and would not require additional capital improvements or rental space.

SOURCES OF INFORMATION

Department of Revenue
Department of Public Safety - Missouri State Highway Patrol
Office of Prosecution Services
State Public Defender's Office
Department of Health and Senior Services
Department of Mental Health
Department of Social Services
Department of Insurance, Financial Institutions and Professional Registration
Department of Corrections
Department of Transportation



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