

COMMITTEE ON LEGISLATIVE RESEARCH
OVERSIGHT DIVISION

FISCAL NOTE

L.R. No.: 0569-01
Bill No.: SB 120
Subject: Insurance - General; Insurance - Automobile; Insurance - Health; Motor Vehicles;
 Roads and Highways; Transportation
Type: Original
Date: February 12, 2019

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 2020	FY 2021	FY 2022
	\$0	\$0	\$0
Total Estimated Net Effect on General Revenue	\$0	\$0	\$0

ESTIMATED NET EFFECT ON OTHER STATE FUNDS			
FUND AFFECTED	FY 2020	FY 2021	FY 2022
Brain Injury Fund (0742)	(\$833)	(\$1,000)	(\$1,000)
Total Estimated Net Effect on <u>Other</u> State Funds	(\$833)	(\$1,000)	(\$1,000)

Numbers within parentheses: () indicate costs or losses.
 This fiscal note contains 13 pages.

ESTIMATED NET EFFECT ON FEDERAL FUNDS			
FUND AFFECTED	FY 2020	FY 2021	FY 2022
Total Estimated Net Effect on <u>All</u> Federal Funds	\$0	\$0	\$0

ESTIMATED NET EFFECT ON FULL TIME EQUIVALENT (FTE)			
FUND AFFECTED	FY 2020	FY 2021	FY 2022
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 2020	FY 2021	FY 2022
Local Government	\$0	\$0	\$0

FISCAL ANALYSIS

ASSUMPTION

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

Oversight notes that the agencies mentioned above have stated the proposal would not have a direct fiscal impact on their organization. Oversight does not have any information to the contrary. Therefore, Oversight will reflect a zero impact on the fiscal note for these agencies.

Officials at the **Department of Revenue (DOR)** assume the following regarding this proposal:

Administrative Impact

To implement the proposed changes, the Department will be required to:

- Update the Missouri Driver Guide;
- Update the Missouri Motorcycle Manual; and
- Update the Department website.

FY 2020 - Driver License Bureau

Management Analysis Spec II	20 hrs. @ \$20.57 per hr.	= \$411
Revenue Manager	10 hrs. @ \$20.59 per hr.	= \$206
Total		= \$617

FY 2020 - Personnel Services Bureau

Administrative Analyst III	20 hrs. @ \$19.80 per hr.	= \$396
Management Analysis Spec I	20 hrs. @ \$18.42 per hr.	= \$368
Total		= \$764

Total Costs = **\$1,381**

The Department anticipates that we will be able to absorb these costs and that there will be No Impact.

ASSUMPTION (continued)

Oversight assumes DOR will use existing staff and will not hire additional FTE to conduct these activities; therefore, Oversight will not reflect the administrative costs DOR has indicated on the fiscal note.

Officials from the **Department of Social Services (DSS)** assume the following regarding this proposal:

Currently, all users of motorcycles and motortricycles are required to wear protective headgear when the vehicle is in motion. This bill 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, RSMo, 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) medical payment insurance coverage;
- 2) maintains proof of financial responsibility; and
- 3) coverage by a health insurance policy or other form of insurance providing medical payment benefits of at least \$1,000,000.

Division of Legal Services

The Division of Legal Services (DLS) defers to the MO HealthNet Division for any fiscal impact that SB 120 may have on the MO HealthNet program. SB 120 will not have a fiscal impact on DLS.

Missouri Healthnet Division

Section 302.026, RSMo.:

The Missouri Healthnet Division (MHD) assumes the medical benefits provided under MO HealthNet meet the requirements as specified in the bill to operate a motorcycle without a helmet, whereas uninsured individuals would be prohibited from riding a motorcycle un-helmeted. There are two categories of individuals who would sustain severe traumatic brain injuries (TBI) and result in increased MO HealthNet expenditures.

- 1) Individuals who are privately insured at the time of the accident, but sustain severe 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.

ASSUMPTION (continued)

- 2) Individuals who are Medicaid recipients at the time of the accident and sustain severe TBI.

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 ($1,979 * 95\% = 1,880.1$) 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 (most current data available) 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 ($137.2 - 88.4$).

- 1) 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. MHD assumes that of those individuals with new TBIs, 15% would qualify within the first year, 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 2020, 18.3 in FY 2021, and 32.9 in FY 2022. 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 2018 annual Medicaid expenditures for a recipient with PTD trended annually by a 2.1% inflationary factor, MHD estimates an annual first year cost of \$17,641 per person for a total first year cost of \$128,779 in FY 2020.

- 2) MHD further assumes that of the 48.8 individuals annually sustaining severe TBI as a result of this legislation, 8.23% (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 4.0 individuals.

Based on a 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 2018. Therefore, the initial hospitalization cost is estimated to be \$20,601 per person in FY 2020 or \$82,404.00 ($\$20,601 * 4.0$ individuals).

ASSUMPTION (continued)

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 2018 expenditures) is \$6,594. MHD assumes annual expenditures will increase to the PTD level for an annual increase of \$10,329 per person sustaining a TBI as a result of this legislation. This amount is trended annually by 2.1%. MHD estimates the annual costs for caring for an individual with TBI will be \$41,315 (\$10,328.71* 4.0 individuals each year).

The total annual cost for individuals who are Medicaid recipients at the time of the accident is \$125,472 (\$82,404.00+ \$43,945.43). 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.

MHD estimates the total impact as follows:

FY 2020: Total - \$254,252; GR - \$87,493; Federal - \$166,759
FY 2021: Total - \$502,267; GR - \$172,840; Federal - \$329,427
FY 2022: Total - \$826,793; GR - \$284,516; Federal - \$542,277

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.

Until the FY 2020 budget is final, the Department cannot identify specific appropriations.

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

Changing the helmet law 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 motorcycle crash statistics provided by the Missouri State Highway Patrol, there were 2,044 personal injuries that resulted from motorcycle crashes in 2017.

ASSUMPTION (continued)

Of these 2,044 injuries, 125 involved persons age 18 to 20 and 1,698 involved persons age 21 through 64. According to a National Occupant Protection Use Survey, it is estimated that half of those persons would not be wearing a helmet if this proposed legislation is passed; resulting in 62.5 (age 18-20) and 849 (age 21-64) individuals involved in a motorcycle crash while not wearing a helmet ($125 \times .50 = 62.5$ and $1,698 \times .50 = 849$).

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 16 additional participants dually enrolled in CYSHCN and HCY ($62.5 \times .50 \times .50 = 16$), with 50 percent (or 8 participants) of the HCY enrollments aging out into the MFAW Program in subsequent years ($16 \times .50 = 8$), and 212 additional enrollments to the ABI Program per year ($849 \times .50 \times .50 = 212$).

The average cost per participant for CYSHCN is \$821.37 per year. The total needed for CYSHCN services would be \$13,142 ($\821.37×16 participants) per year.

Both HCY and MFAW are partially federally funded at 65.588 percent federal and 34.412 percent state Medicaid match (FY 2020 FMAP rate). The average cost per participant to provide services through the HCY Program is \$21,042 per year. The total needed for HCY services would be \$336,676 ($\$21,042.27 \times 16$ participants), funded as \$220,819 by federal and \$115,857 by the state.

The average cost per participant to provide services through the MFAW Program is \$99,451 per year. The total needed for services through the MFAW Program would be \$795,606 (8 MFAW participants \times $\$99,450.78$), funded as \$518,759 by federal and \$276,847 by the state.

The current average cost per participant to provide rehabilitation services through the ABI Program is \$3,281 per year. The total needed for rehabilitation services would be \$695,572 ($\$3,281 \times 212$ participants). The increase in participants would also require the ABI Program to add six additional Service Coordinators, based on the fact that currently there is an average of 40 participants per Service Coordinator caseload ($212/40$ participants per Service Coordinator).

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 six additional Service Coordinators would be \$370,800 ($\$61,800 \times 6$ Service Coordinators).

ASSUMPTION (continued)

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 2018, there were 135 Missourians on the ABI Program wait list, with a wait time of over 243 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 Programs 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 2021.

Brain Injury Fund

Currently there is a two dollar surcharge collected for the Brain Injury Fund (Section 304.028, RSMo) from the fines assessed for each citation given for failure to wear protective headgear. If it is no longer illegal to not wear protective headgear for those age 18 and over, it would cause a decrease in the amount collected for the Brain Injury Fund.

According to the Missouri State Highway Patrol there were 542 citations made in 2016 and 447 citations in 2017 for failure to wear protective headgear while riding a motorcycle for those age 18 and older. This is an average of 495 citations each year. Therefore it is estimated that revenue to the Brain Injury Fund will decrease by approximately \$1,000 each year from the current level of collection.

Oversight does not have any information to the contrary in regards to DHSS's assumptions; therefore, Oversight will reflect DHSS's loss of revenue on the fiscal note.

Oversight notes the Brain Injury Fund (0742) had a fund balance of \$785,880 as of January 2019.

Officials from the **Department of Mental Health (DMH)** assume the following regarding this proposal:

ASSUMPTION (continued)

Currently, the Division of Developmental Disability (DD) waiver programs' eligibility requirements mandate that a diagnosis of developmental disability be assigned prior to the age of 22 for inclusion into a waiver program, except for an intellectual disability, which must be assigned prior to the age of 18 (see Section 630.005, RSMo). This proposal would allow for expansion of the number of eligible DD Medicaid Waiver participants, in that riders 18 to 21 years of age could sustain a traumatic brain injury (TBI) while operating a motorcycle or motortricycle without protective headgear, thereby potentially qualifying them for DD waiver services.

DD estimates an average cost per day of \$393 (\$143,445 / yr.) for residential services. Utilizing the methodology below, the following increased costs could occur: \$246,810 state share increased cost per year, plus \$470,415 federal share increased cost per year. The total increased cost per year could equal \$717,225. This estimate could also rise and fall based on the federal FMAP for DMH Medicaid waiver services.

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.

For this analysis, the DMH assumes riders 18-21 years of age would be in compliance with Section 302.026.1, RSMo. at the time of a motorcycle crash resulting in TBI, and would carry the proposed minimum medical payment or other insurance coverage of \$1 million. 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 or cover an individual's medical bills, but would not serve as a mitigating eligibility factor for future placement in a DMH waiver program.

Crash Rates

The MO State Highway Patrol reports 1,847 personal injury motorcycle crashes in 2016, injuring 2,183 people (see Missouri State Highway Patrol, Statistical Analysis Center, Missouri Traffic Safety Compendium, Report Year 2016, Report 7.1 - Crashes Involving Motorcycles by Crash Severity and Personal Injury Severity). Link:
<http://www.mshp.dps.missouri.gov/MSHPWeb/SAC/Compendium/TrafficCompendium.html#>

The State's ten year average for motorcycle crashes between 2007 and 2016 is 1,840 and 2,146 for persons injured (see Report 7.1 for the years 2007 through 2016 - same link as above).

ASSUMPTION (continued)

In 2016, the number of crashes increased 6.33% from the preceding year (see Missouri State Highway Patrol, Statistical Analysis Center, Missouri Traffic Safety Compendium, Report Year 2016, Report 7.2 - Motorcycle Involved Crashes by Annual Percent Change - same link as above).

Based on available data for 2012 through 2016, projections indicate Missouri will have experienced an average of 2,128 motorcycle crash injuries per year between 2017 and 2021 (see Missouri State Highway Patrol, Statistical Analysis Center, Missouri Traffic Safety Compendium, Report 7.1 - Crashes Involving Motorcycles by Crash Severity and Personal Injury Severity for the years 2012 through 2016 - same link as above).

State Demographics

The United States Census Bureau estimates that in 2017 the percentage of persons aged 18 to 21 years old residing in Missouri comprised 5.218% of the total state population, or 319,000 persons out of 6,113,532 (Citation: Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2017 Source: U.S. Census Bureau, Population Division Release Date: June 2018).

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 15-24. The Centers for Disease Control released this report in 2010, which is the most recent in-depth national-level study on the frequency of TBI-related medical encounters, including hospitalization and emergency department visit data for the years 2002-2006. Comparing this data to the census data previously discussed yields an estimate of 259 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 2018, the Division of DD admitted 46 individuals with head injuries (data is based on the diagnosis entered in DMH's client services system when the consumer is admitted).

DD estimates an average cost per day of \$393 (\$143,445/yr.) for residential services.

- The state share of this cost in FY 2020 is \$49,362 ($\$143,445 \times 34.412\%$ state share = \$49,362).
- The federal share of this cost in FY 2020 is \$94,083 ($\$143,445 \times 65.588\%$ federal share = \$94,083).
- The total cost in FY 2020 is \$717,225.

ASSUMPTION (continued)

Estimated Annual Fiscal Impact

Assuming a 5% rate of TBI incidence due to motorcycle crashes for each year between 2019 and 2023 for individuals aged 18 to 21 in Missouri, a total of 25 additional individuals or 5 people per year could become eligible for DD waiver services.

Utilizing the Division of DD's cost estimates for FY 2020, this represents an annual increased cost to the DMH of \$246,810 of general revenue per year (\$49,362 x 5 = \$246,810). In addition, there would be an annual increased cost to the DMH of \$470,415 of federal funds per year (\$94,083 x 5 = \$470,415). The Department assumes we would receive the federal Medicaid match dollars. Thereby making the net cost to DMH the \$246,810 per year in general revenue funds.

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 2020 (10 Mo.)	FY 2021	FY 2022
BRAIN INJURY FUND			
<u>Loss - DHSS - loss of fine revenue due to helmets no longer being required p. 8</u>	<u>(\$833)</u>	<u>(\$1,000)</u>	<u>(\$1,000)</u>
ESTIMATED NET EFFECT ON THE BRAIN INJURY BUND	<u>(\$833)</u>	<u>(\$1,000)</u>	<u>(\$1,000)</u>
<u>FISCAL IMPACT - Local Government</u>	FY 2020 (10 Mo.)	FY 2021	FY 2022
	<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 Transportation
Department of Revenue
Department of Public Safety - Missouri Highway Patrol
Department of Insurance, Financial Institutions and Professional Registration
Department of Health and Senior Services
Department of Social Services
Department of Corrections
Office of Prosecution Services
Office of the State Public Defender
Department of Mental Health

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