



Teenagers and later licensure: What does research say?

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Anne T. McCartt

The Insurance Institute for Highway Safety,

founded in 1959, is an independent, nonprofit, scientific, and educational organization dedicated to reducing the losses — deaths, injuries, and property damage — from crashes on the nation's highways.

The Highway Loss Data Institute,

founded in 1972, shares and supports this mission through scientific studies of insurance data representing the human and economic losses resulting from the ownership and operation of different types of vehicles and by publishing insurance loss results by vehicle make and model.

Both organizations are wholly supported by auto insurers.

Insurance Institute for Highway Safety



Arlington, VA – headquarters

- 66 employees
 - Research & Communications (48)
 - Highway Loss Data Institute (18)



Ruckersville, VA –
Vehicle Research Center

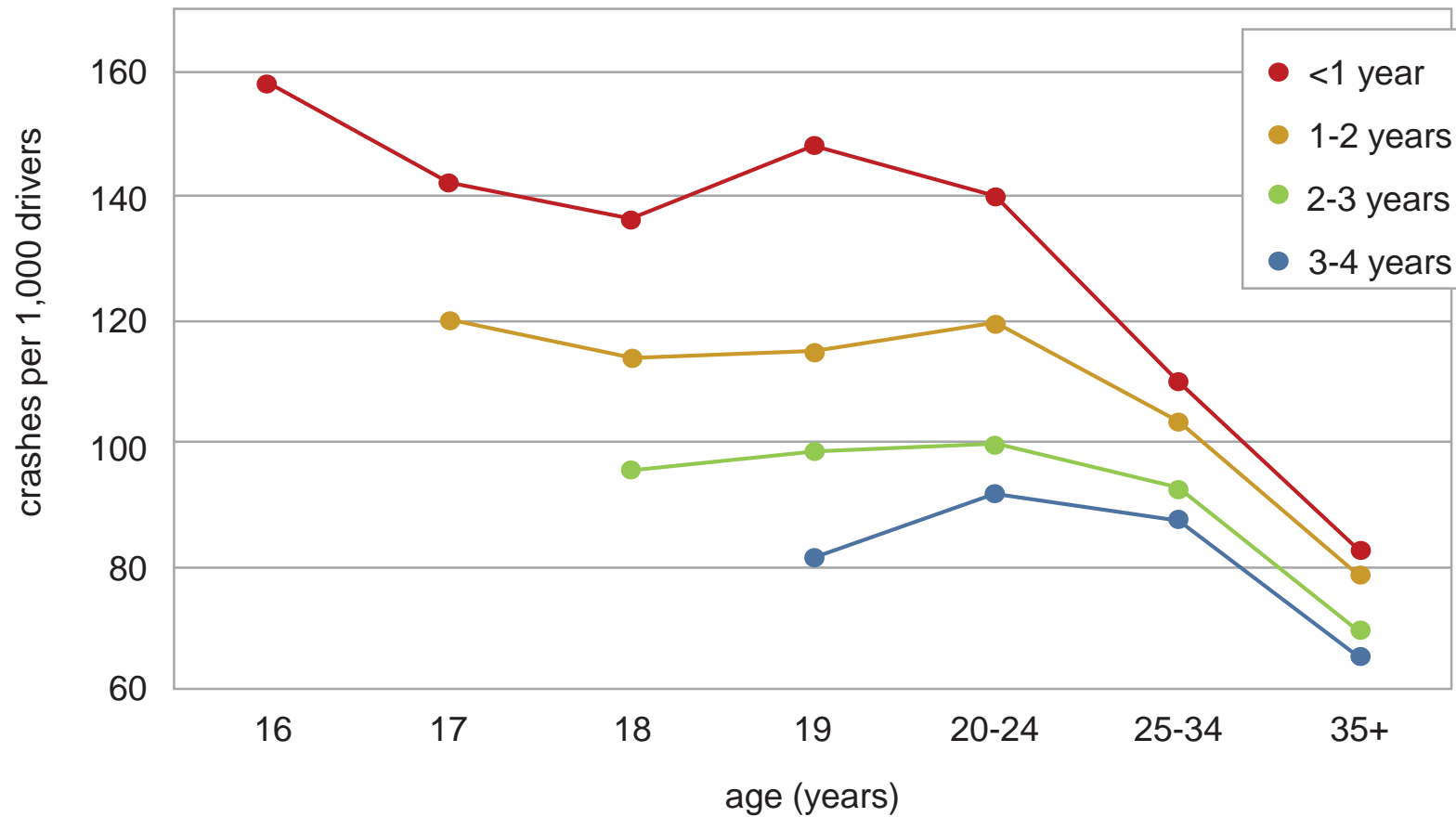
- 39 employees

Is age or experience the bigger factor in crash risk?

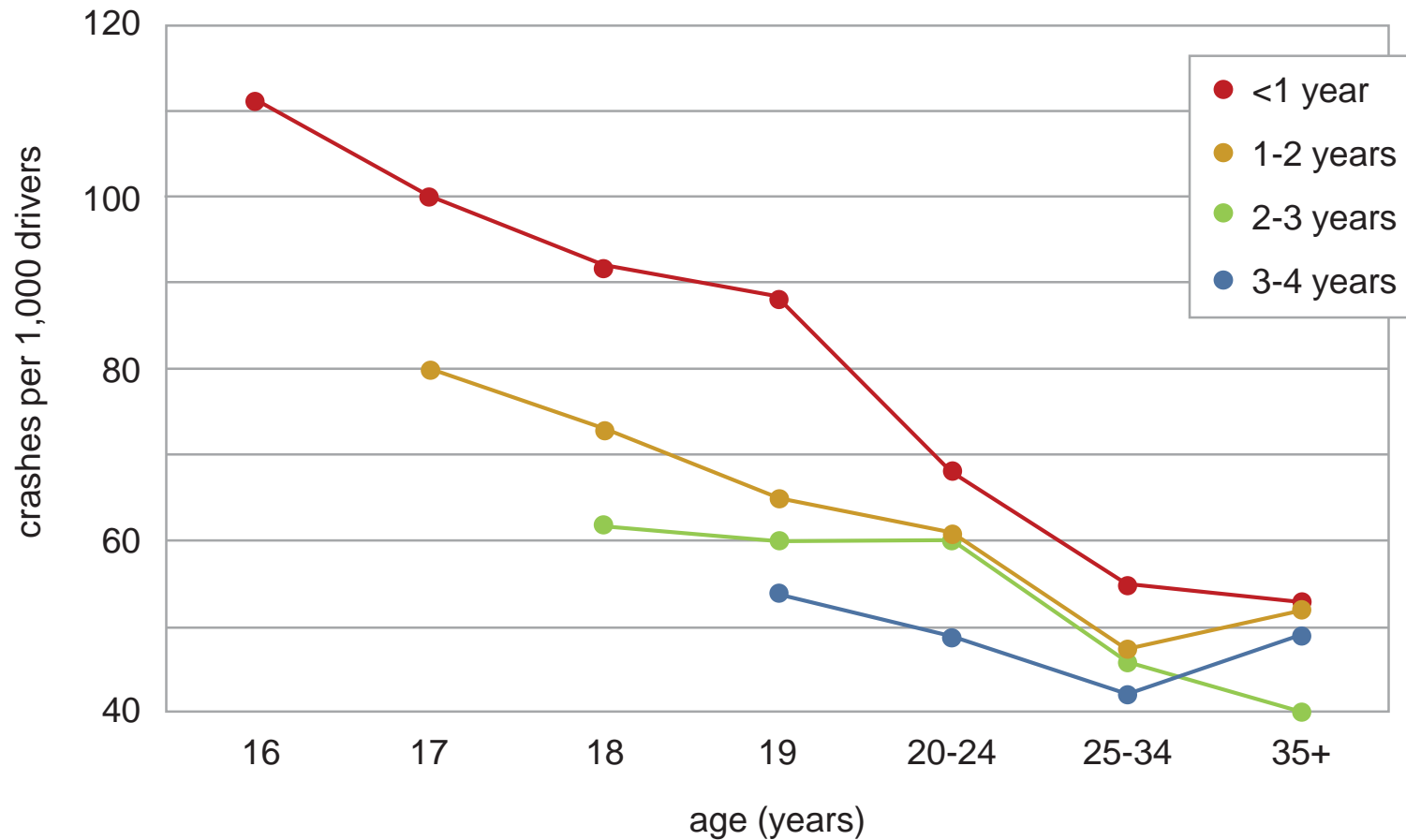
Review of international research (McCartt et al., 2009)

- Age and experience have important, independent effects on crash risk, even after considering differences in driving mileage
 - Generally, more powerful effect from length of licensure than age
- Steep learning curve for drivers of all ages: the longer licensure, the lower the crash rates
- With equivalent lengths of licensure, teenagers have dramatically higher crash rates than adults
- Among novice drivers, crash rates per licensed driver are higher for 16 year-olds than for 17 year-olds, but rates for 17 year-olds are not consistently higher than for 18-19 year-olds
 - Older and younger teenagers vary with regard to amounts and types of driving and lifestyle, economic, social factors

Male crash rates per licensed driver during 1st-4th years of licensure by driver age, Ontario, Canada



Female crash rates per licensed driver during 1st-4th years of licensure by driver age, Ontario, Canada



Graduated driver licensing (GDL) addresses both age and experience

learner's phase

entry age
minimum duration
supervised driving certification

intermediate phase


entry age
night driving restriction
passenger restriction
duration of restrictions

Licensing requirements in 1995 vs. April 2014

	number of states	
	1995	2014
minimum learner's permit age 16 or older	8	8 & D.C.
learner's permit for at least 6 months	0	46 & D.C.
30 hours or more of certified practice driving	0	41 & D.C.
minimum intermediate licensing age 16-1/2 or older	2	9 & D.C.
night driving restriction once licensed	9	49 & D.C.
teen passenger restriction once licensed	0	43 & D.C.

Why the recent focus on older teenagers?

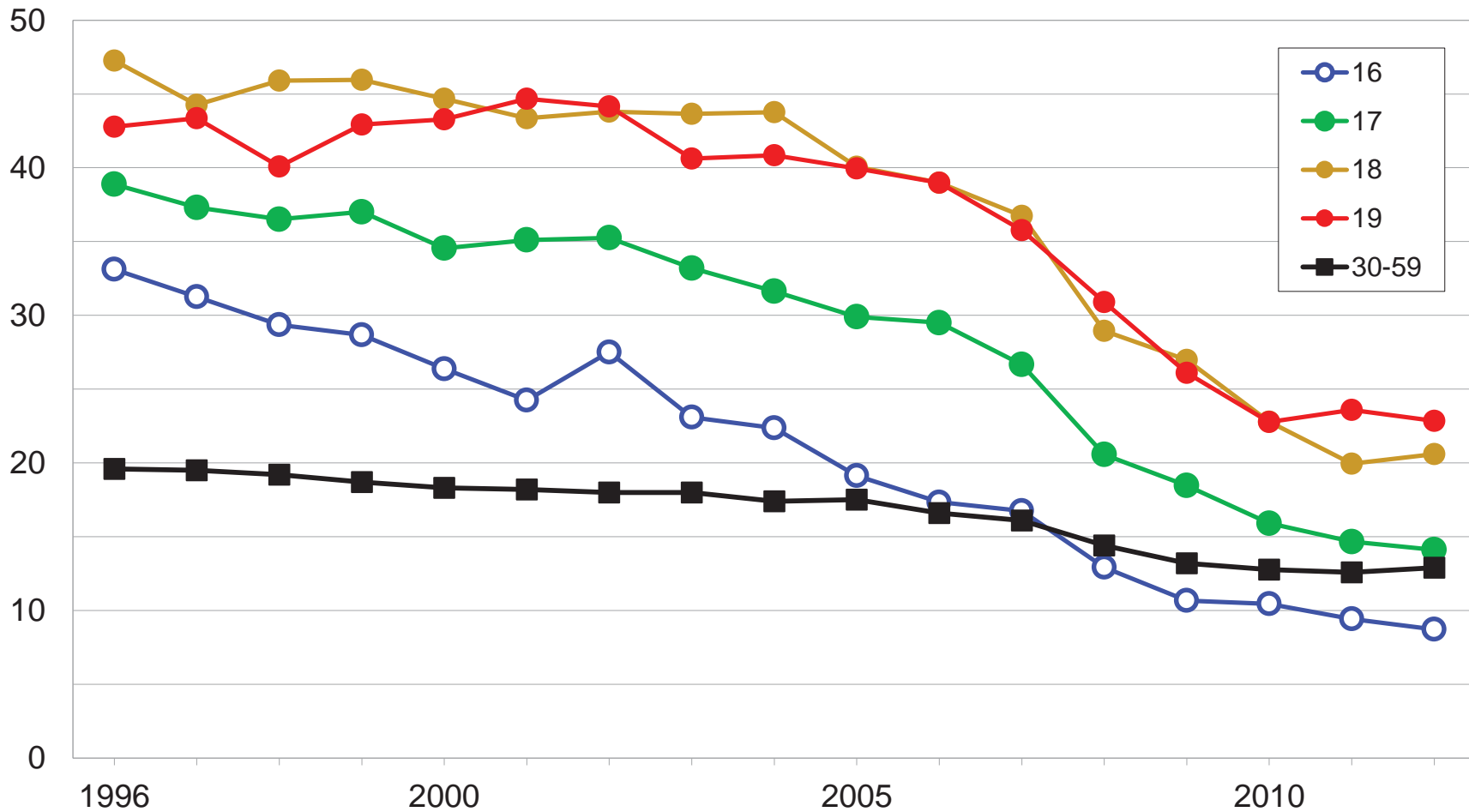
- Most states apply GDL to license applicants younger than 18, and most lift probationary license restrictions when teenagers turn 18
- GDL highly effective in reducing young teenagers' crash rates
- Mixed findings of national studies on effects of GDL on older teenagers' crashes
 - Masten et al. (2011) reported stronger GDLs associated with lower fatal crash rates among 16 year-olds but higher rates among 18 year-olds
 - McCartt et al. (2010) found no effect of stronger GDLs on fatal crash rates of 18-19 year-olds, and Trempe (2009) found reduced rates of insurance collision claims for older teens
- Some states considering the New Jersey model of applying GDL to older teenage license applicants



How have younger and older teenagers' national crash rates changed as GDLs have been implemented?

Passenger vehicle fatal crash involvements per 100,000 people

By driver age, 1996-2012

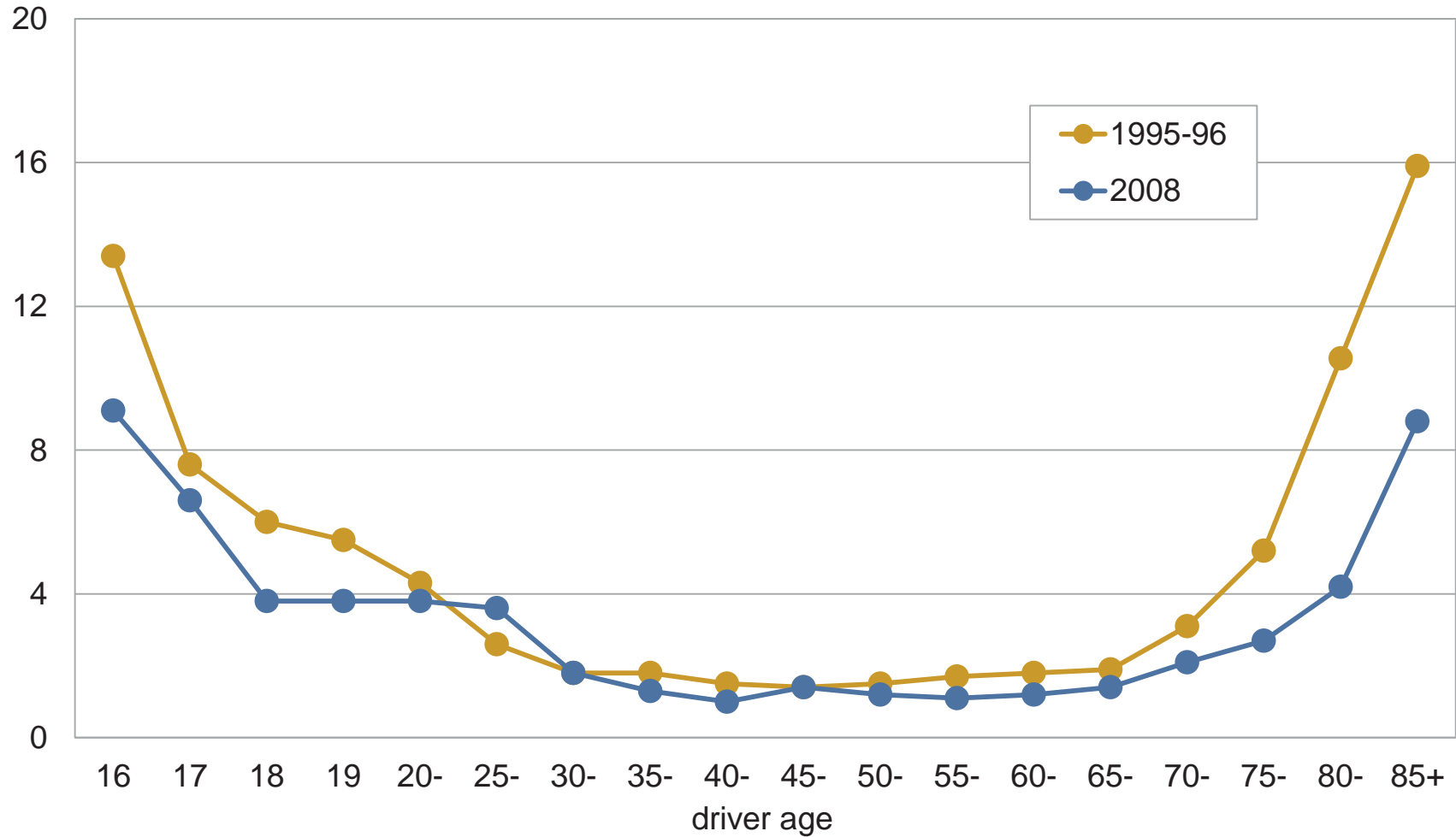


Percent changes in per capita crash involvement rates from 1996 to 2012

Passenger vehicle drivers, by age

driver age	fatal crashes per 100,000 population	police-reported crashes per 1,000 population
16	-74	-65
17	-64	-50
18	-56	-43
19	-45	-35
30-59	-34	-33

Rates of passenger vehicle driver fatal crash involvements per 100 million miles traveled by age, 1995-96 and 2008



Percent changes in crash involvement rates per mile traveled from 1995-96 to 2008

Passenger vehicle drivers, by age

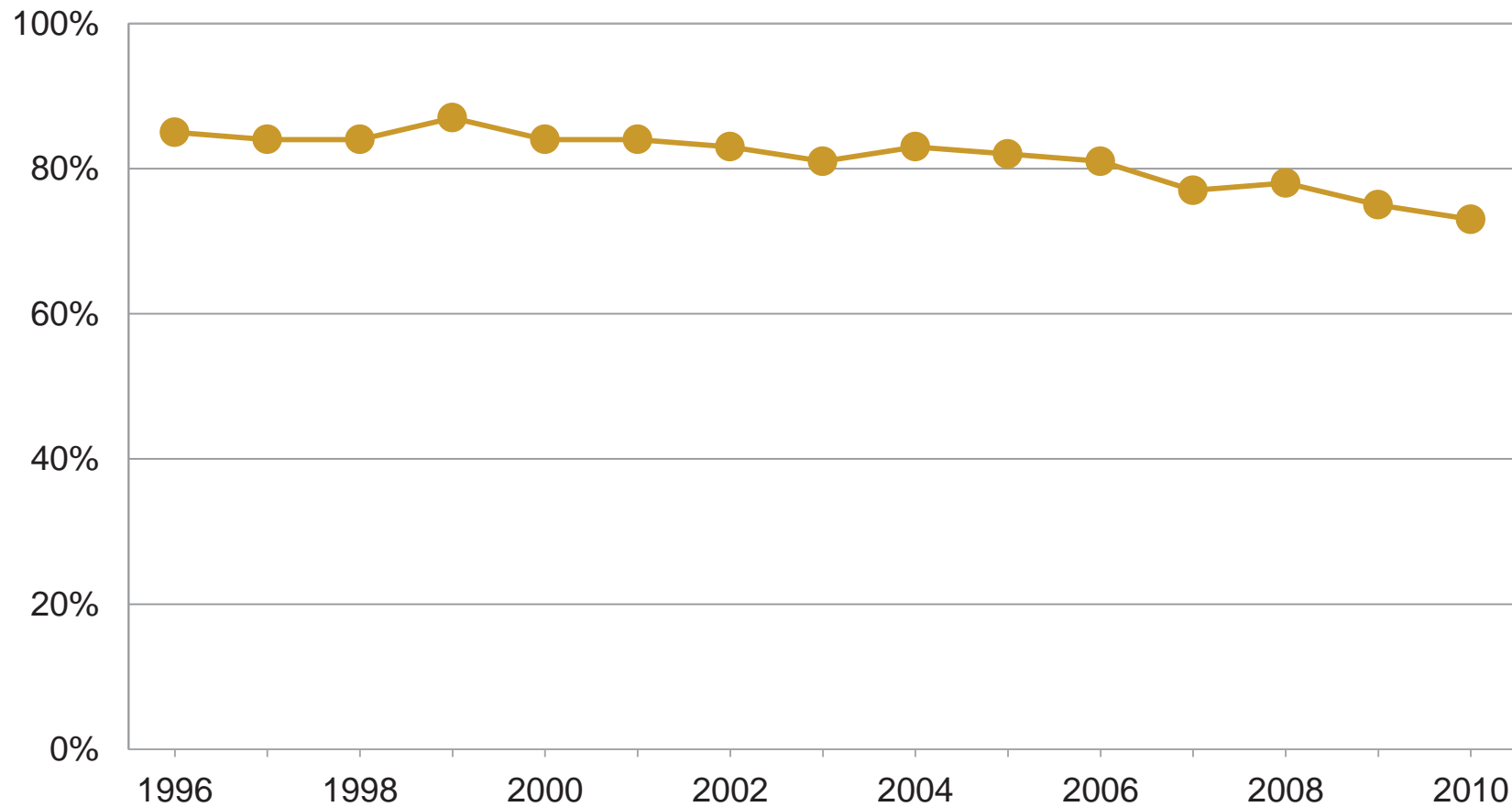
driver age	fatal crashes per 100 million miles traveled	police-reported crashes per 1 million miles traveled
16	-32	-12
17	-13	≈ 0
18	-37	-36
19	-31	-43
30-59	-25	-28



Are teenagers getting licenses later than they used to?

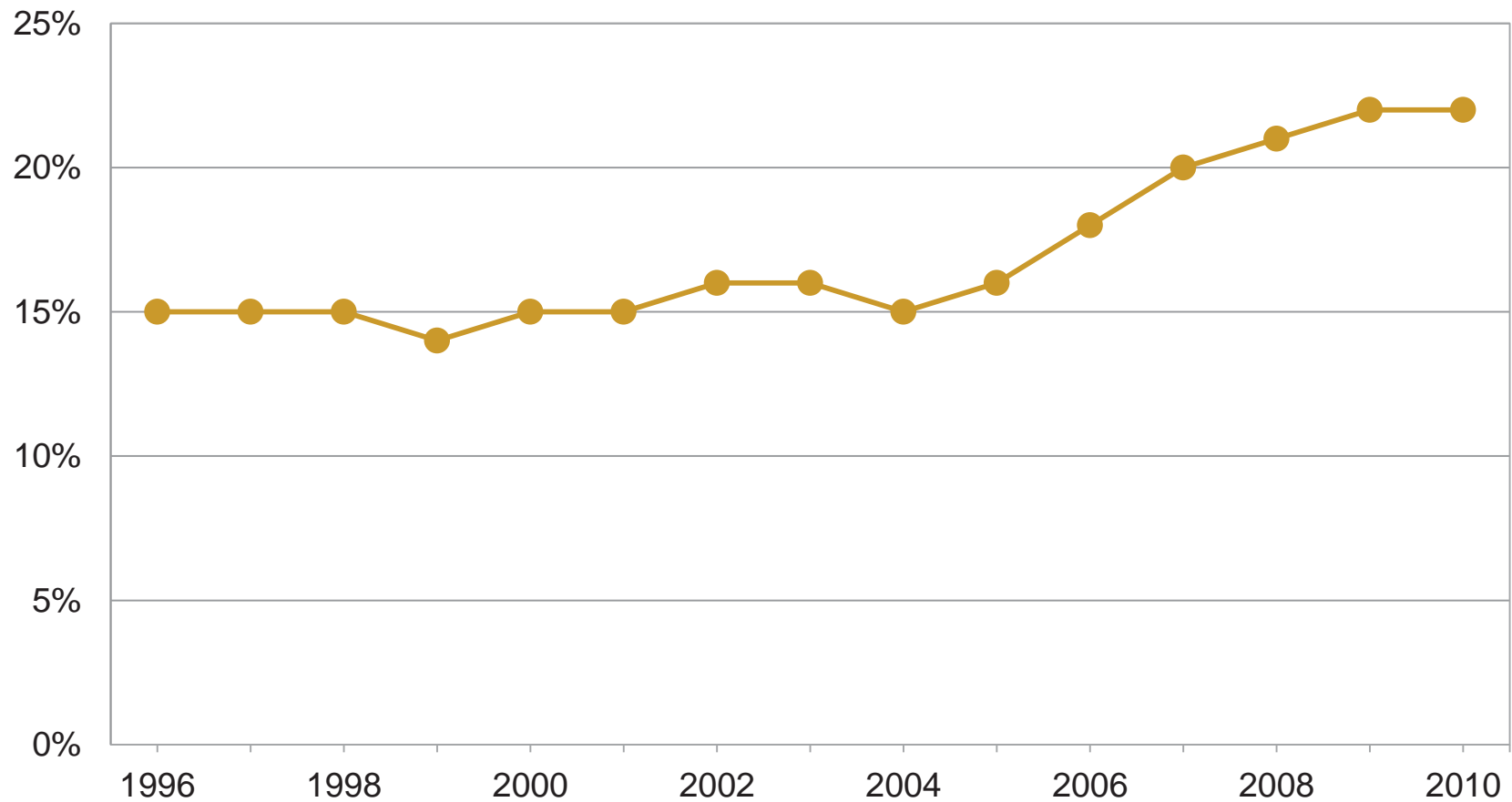
Proportion of high school seniors who reported having a driver's license, 1996-2010

Shults and Williams, 2013



Proportion of high school seniors who reported not driving during an average week, 1996-2010

Shults and Williams, 2013



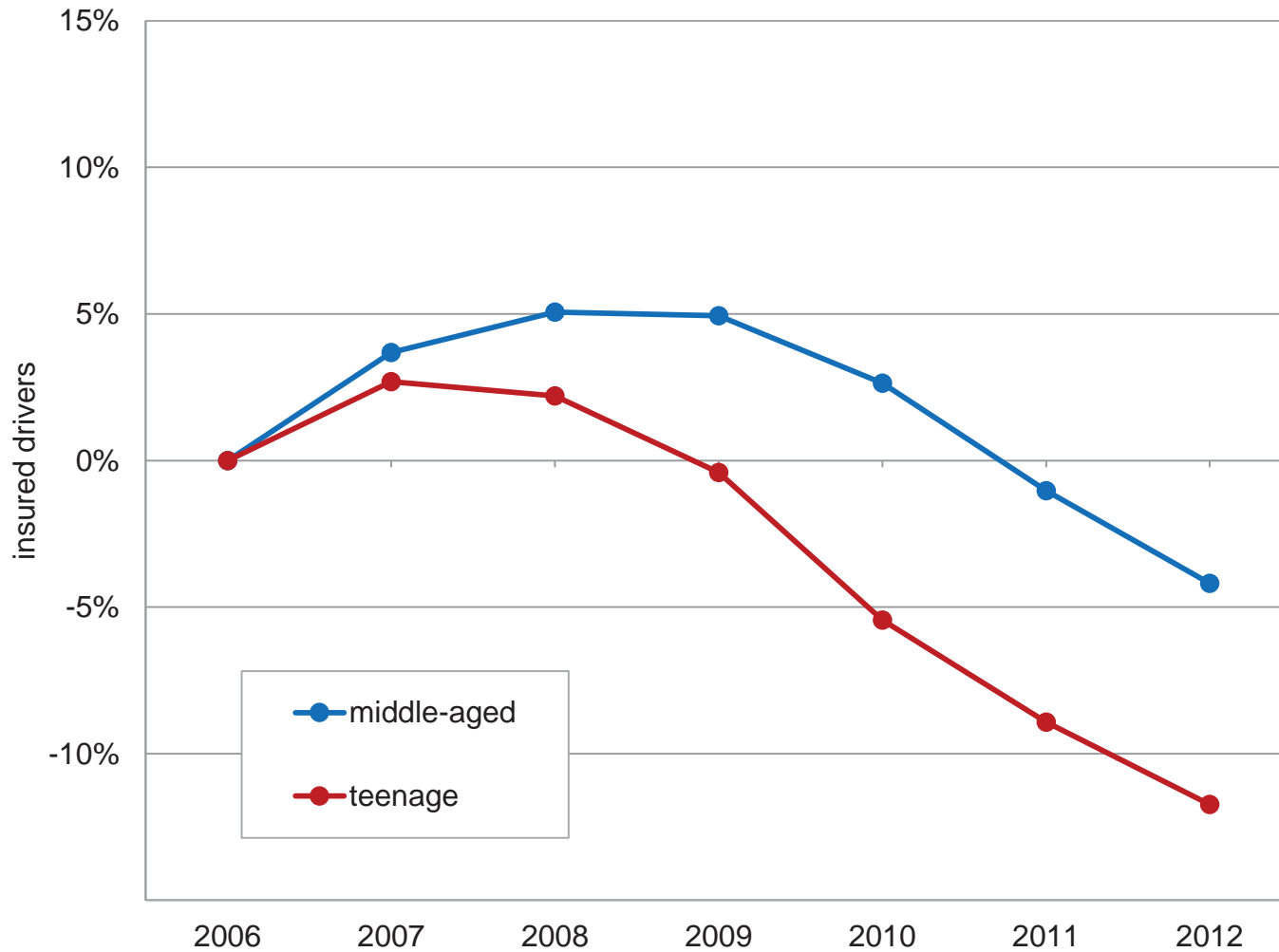
National trends in the number of insured teenagers

Highway Loss Data Institute, 2013

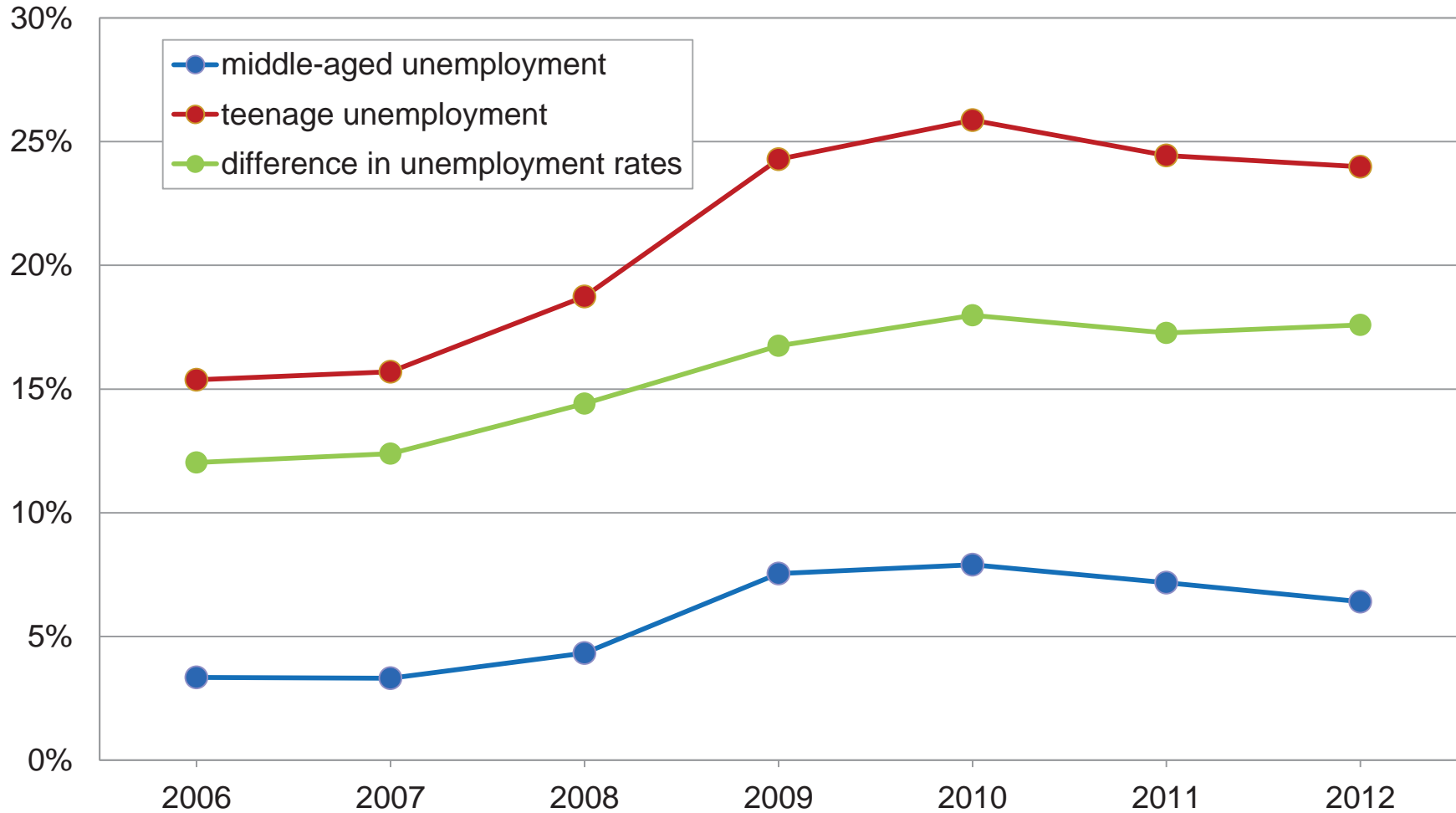
- Study period: 2006-12
- Tracked number of 14-19 year-old drivers rated under collision insurance policies in 49 states and the District of Columbia
 - Collision coverage insures against vehicle damage to an at-fault driver's vehicle in a crash
 - Rated driver typically represents the greatest loss potential in a household for the insured vehicle (usually teenager if there is one)
 - Limited to insurance for 0-9 year-old vehicles
- Compared teenage trends to trends for rated 35-54 drivers
- State-level analyses examined relationship of ratio of teen-to-middle-aged drivers to unemployment rates, GDL laws, and population changes

Trends in insured teenage and middle-aged drivers

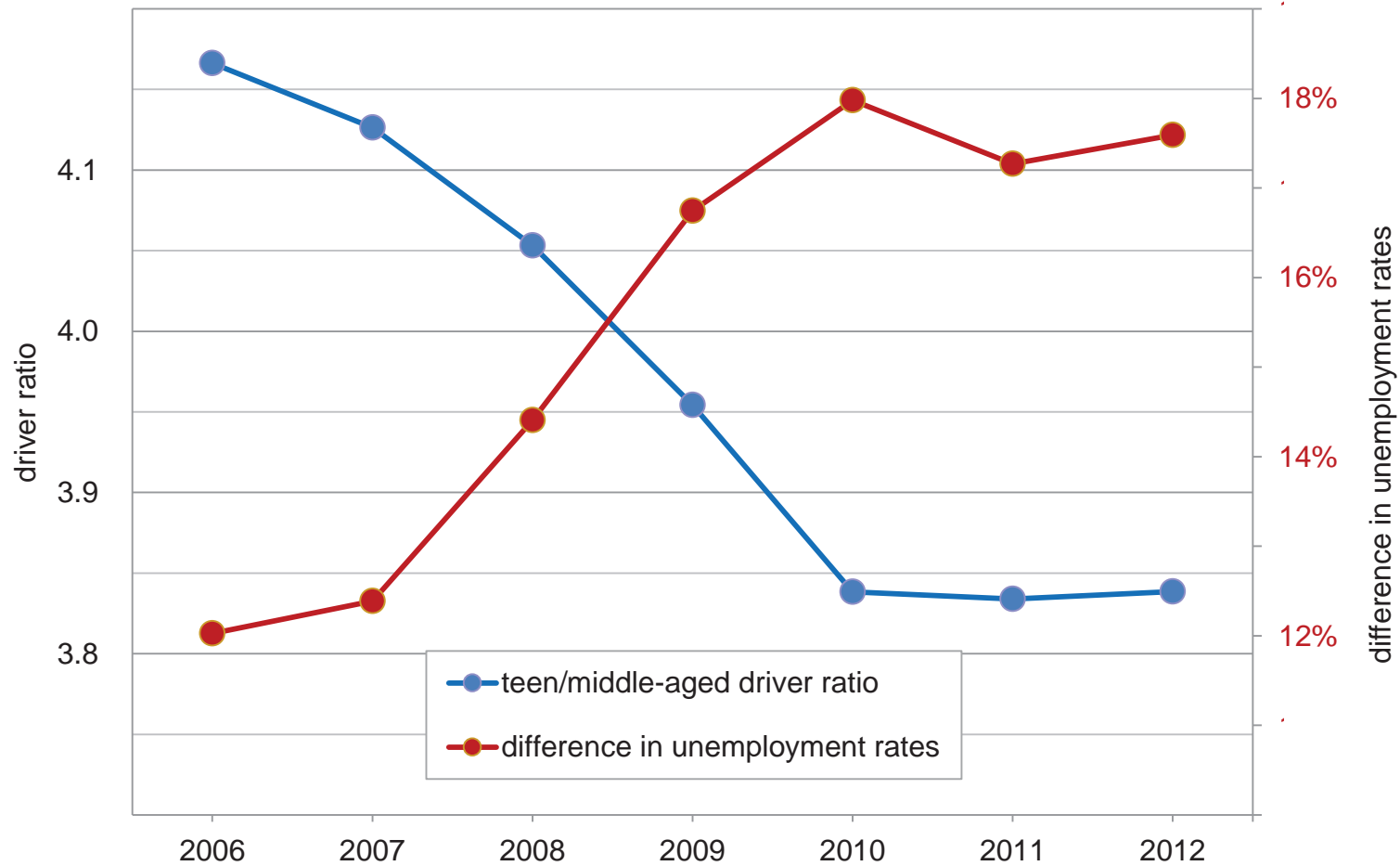
Indexed to 2006



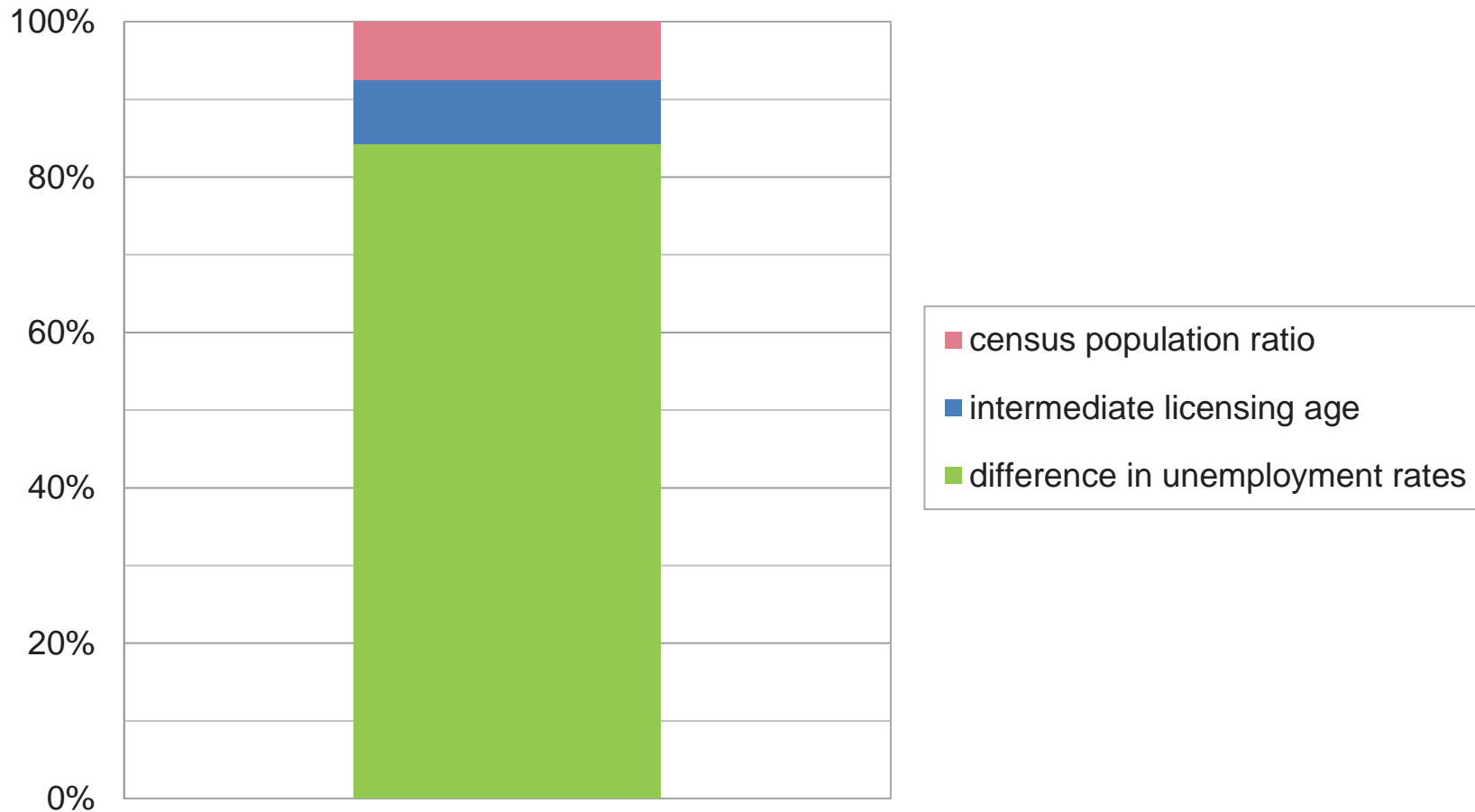
Unemployment rates for teenage and middle-aged workers



Ratio of teenage to middle-aged drivers and difference in unemployment rates between teenage and middle-aged workers



Estimated percent contribution to decline in teenage-to-middle-aged driver ratio, 2006 to 2012





New Jersey teenagers' experiences with licensing laws

New Jersey is a leader in teenage licensing laws

- Minimum learner's permit age of 16
- Minimum probationary license age of 17
- Night driving and passenger restrictions last until age 18
- Graduated driver licensing (GDL) provisions apply to license applicants younger than 21
- Laws have reduced teenage crash rates
 - Crashes among 16 year-olds virtually eliminated
 - Crashes among 17-18 year-olds reduced without adversely affecting crashes of 19 year-olds
- Require learner and probationary license holders to display license plate decals

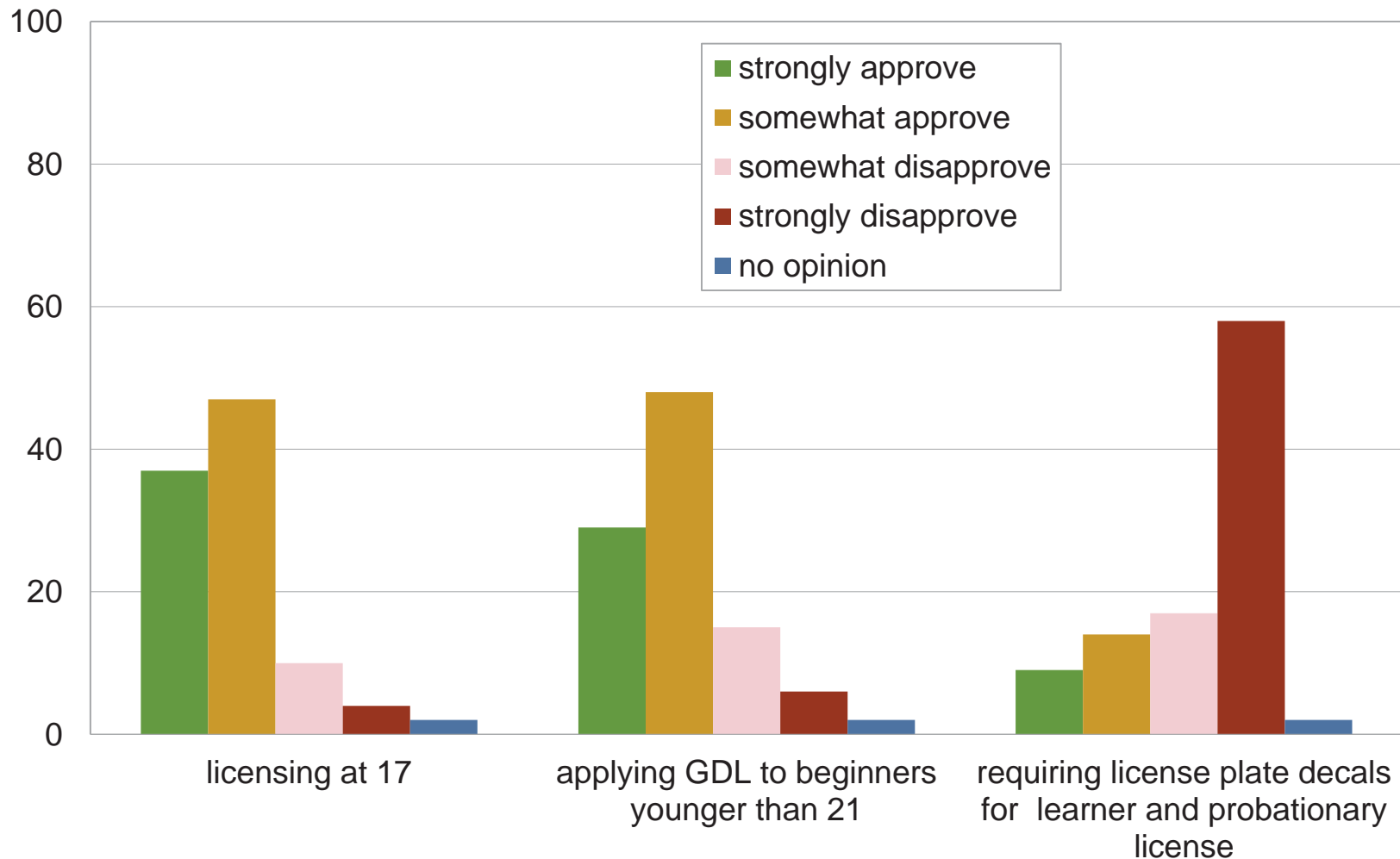
Views and reported behaviors of New Jersey teenagers

- Telephone and online surveys of 1,013 17-19 year-olds during December 2012 and January 2013
- Weighted by race/ethnicity based on U.S. Census population
- Most respondents in high school (41%) or college (52%)
- Most living with parents (70%) or at college (28%)
- Most living in medium (46%) or small (33%) towns

Percent license status of New Jersey teenagers by age

	age 17	age 18	age 19
licensing process not started	8	7	5
learner license	18	6	3
probationary license	74	27	21
full license	0	60	70

Attitudes of 17-19 year-olds toward state licensing policies



Reported compliance with GDL restrictions by teenagers with probationary licenses

Percent of teenagers who said they had....	17 year-olds	18-19 year-olds
driven past 11 p.m. in the past month	29	34
and done so 3 or more times	44	79
and done so 5 or more times	21	49
driven with more than 1 passenger other than family members	43	46
and done so 3 or more times	56	47

Summary

- Both older age and more experience are associated with lower crash risk
- National crash risk of younger and older teenager drivers declined during period of GDL implementation – no evidence of adverse effects on older teenagers
- Recession (not GDL) appears to explain most of recent decline in teenagers' licensure rates
- Most New Jersey teenagers support licensing at 17 and applying GDL to people younger than 21; reported compliance with night restrictions somewhat lower among older teenagers than younger teenagers

Teenagers

Driving carries extra risk for them.

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Teen drivers have crash rates 3 times those of drivers 20 and older per mile driven. Immaturity leads to speeding and other risky habits, and inexperience means teen drivers often don't recognize or know how to respond to hazards.

Graduated licensing reduces teens' driving risk. Graduated licensing allows teens to practice driving with supervision before getting their license and restricts driving after they are licensed. Today all states have at least some elements of graduated licensing. The current best practices are a minimum intermediate license age of 17, a minimum permit age of 16, at least 70 required hours of supervised practice driving, and, during the intermediate stage, a night driving restriction starting at 8 p.m. and a ban on all teen passengers.

Alcohol is a factor in many teen crashes. Although young drivers are less likely than adults to drink and drive, their crash risk is higher when they do. The combination of drinking and driving is made worse by teenagers' relative inexperience both with drinking and with driving.



GDL crash reduction calculator

The Institute's online calculator shows how each state can save lives and reduce crashes by strengthening young driver laws.

Beginning teen drivers

This fact sheet, also available as a brochure, provides information about young drivers and the licensing programs that protect them while learning to drive. Also available in [Spanish](#).

Young drivers: the high-risk years

Teen drivers have much higher crash rates than adults. Fortunately, there are ways parents can help reduce the risks, as shown in this video.



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Dedicated to reducing deaths, injuries,
and property damage on the highway

Anne T. McCartt, Ph.D.

Senior Vice President, Research
amccartt@iihs.org, 703-247-1534