



INSURANCE INSTITUTE  
FOR HIGHWAY SAFETY

HIGHWAY LOSS  
DATA INSTITUTE

# Effects of Graduated Driver Licensing on Fatal Crash and Collision Claim Rates

[www.iihs.org](http://www.iihs.org)

Lifesavers Conference  
Orlando, FL • June 14, 2012

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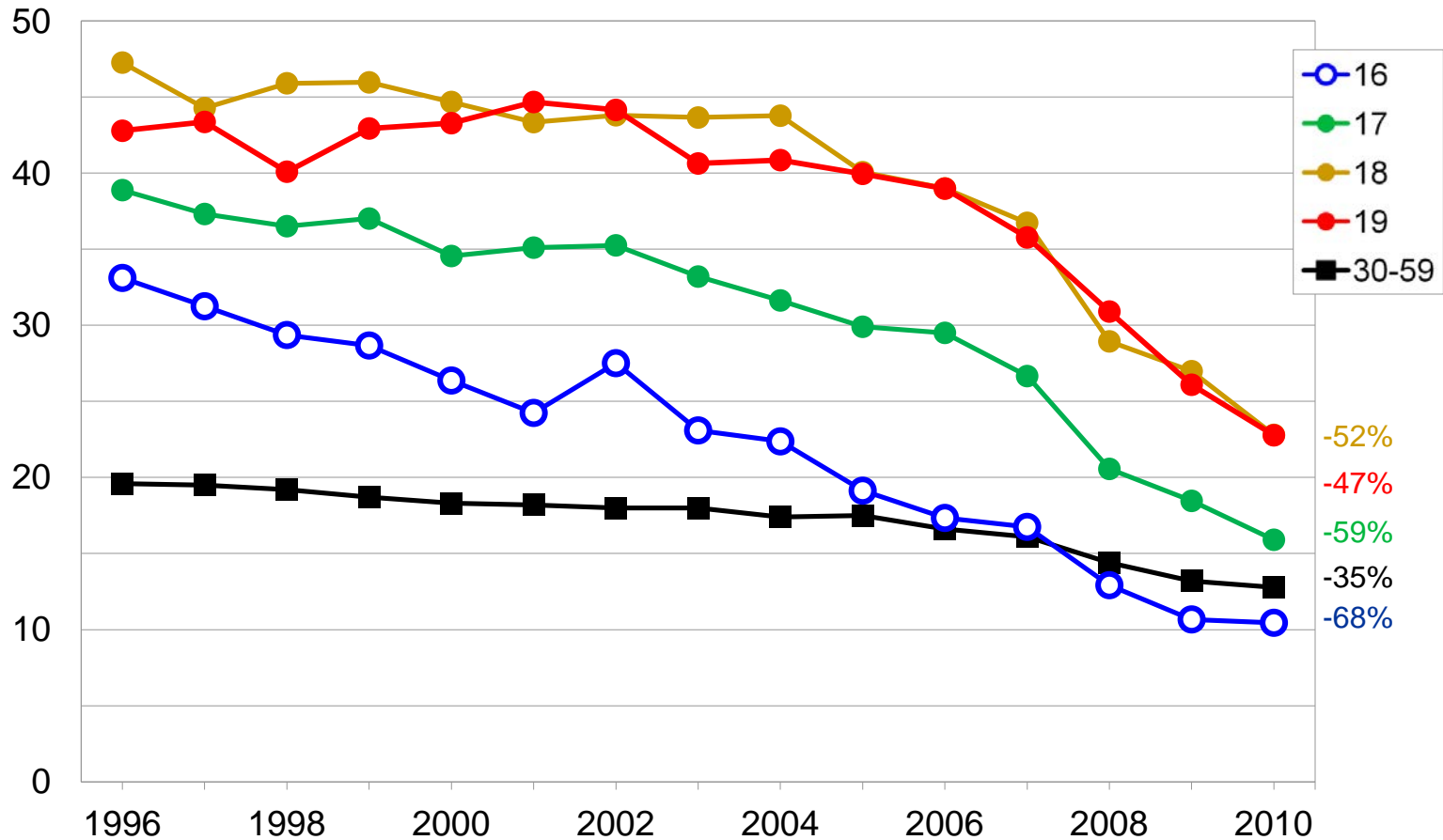
**The Insurance Institute for Highway Safety (IIHS)**, founded in 1959, is an independent, nonprofit, scientific, and educational organization dedicated to reducing the losses — deaths, injuries, and property damage — from crashes on the nation's highways.

**The Highway Loss Data Institute (HLDI)**, 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.

# Fatal crashes per 100,000 people

By driver age, 1996-2010



# IIHS rating system



## learner's phase

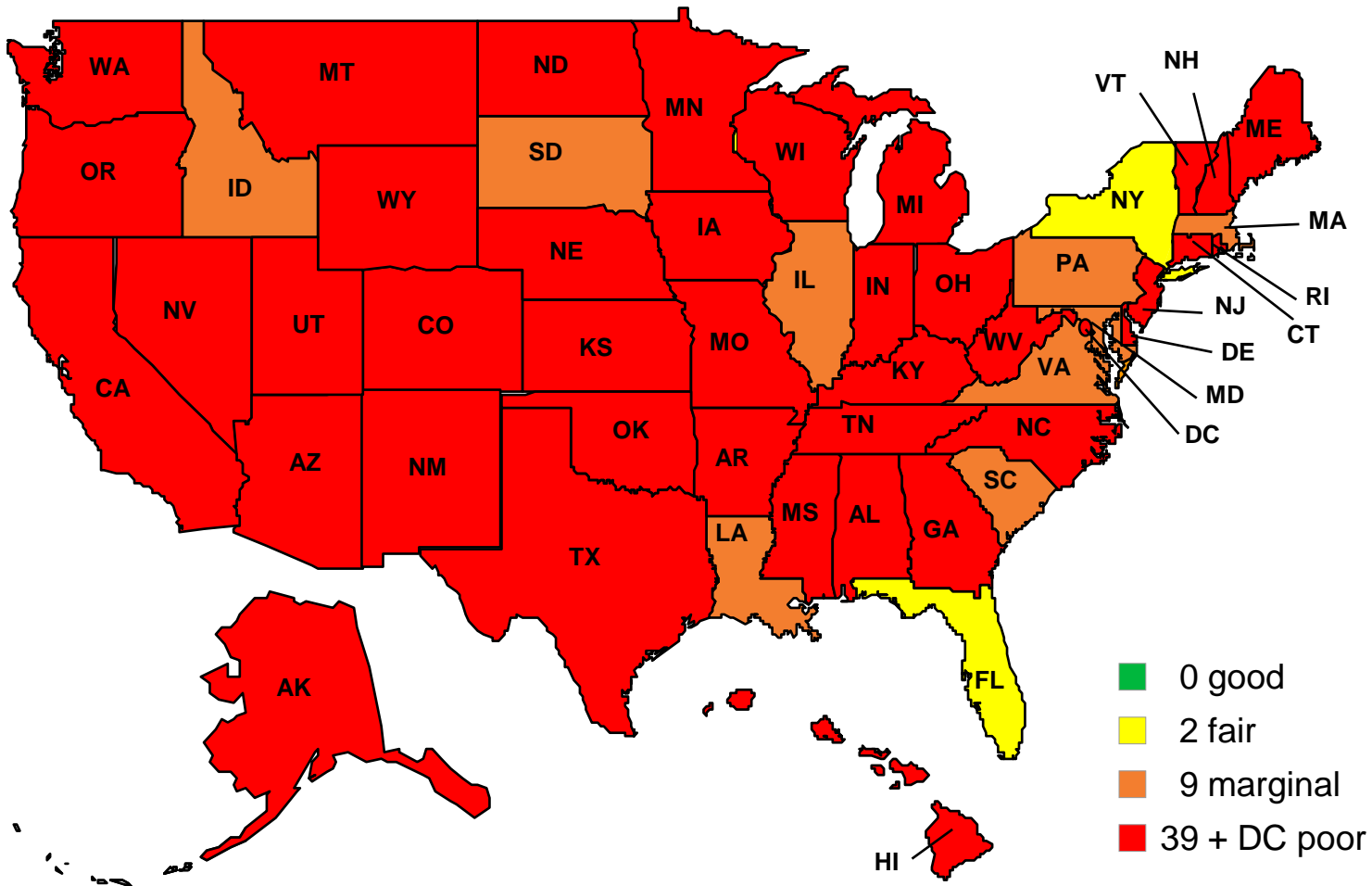
|                                  |
|----------------------------------|
| entry age                        |
| holding period                   |
| supervised driving certification |

## intermediate phase

|                               |
|-------------------------------|
| entry age                     |
| nighttime driving restriction |
| passenger restriction         |
| duration of restrictions      |

# IIHS ratings of graduated licensing laws

July 1996, using 2005-2011 rating system



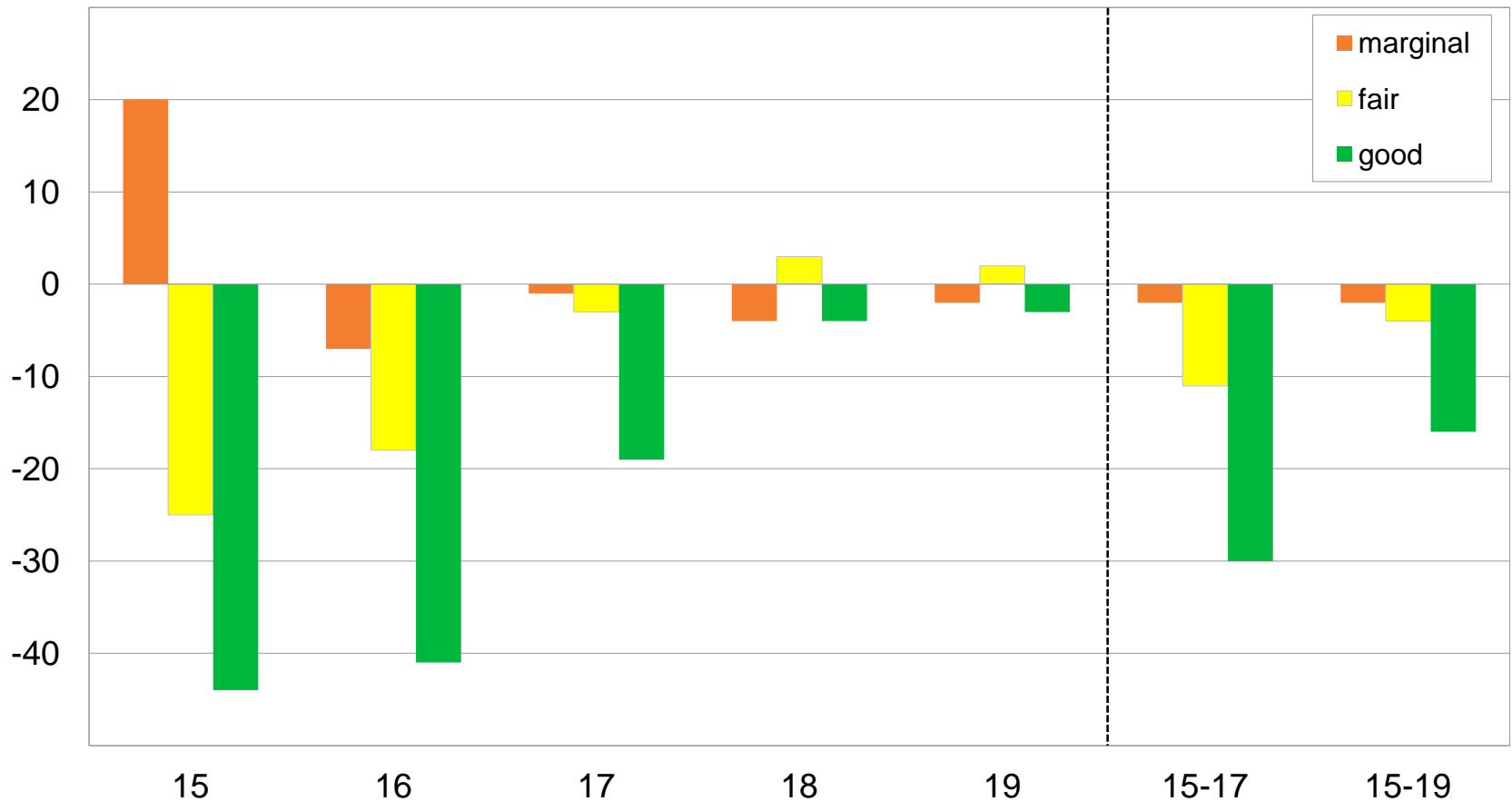


# Effects of GDL on fatal crash rates and collision claim rates

- IIHS national study
  - Quarterly state data during 1996-2007
  - Fatal crash rate per population of teenagers
  - Fatal crash rate of drivers 30-59 accounted for state crash trends, weather, etc.
- HLDI national study
  - Licensed drivers only; no permit stage drivers
  - Annual state data during 1996-2008
  - Rates of claims per 100 insured vehicle years for teenage rated drivers
  - Claim rates for ages 35-55 accounted for state collision claim trends, etc.

# Predicted percent change in fatal crashes of 15-19 year-olds per population

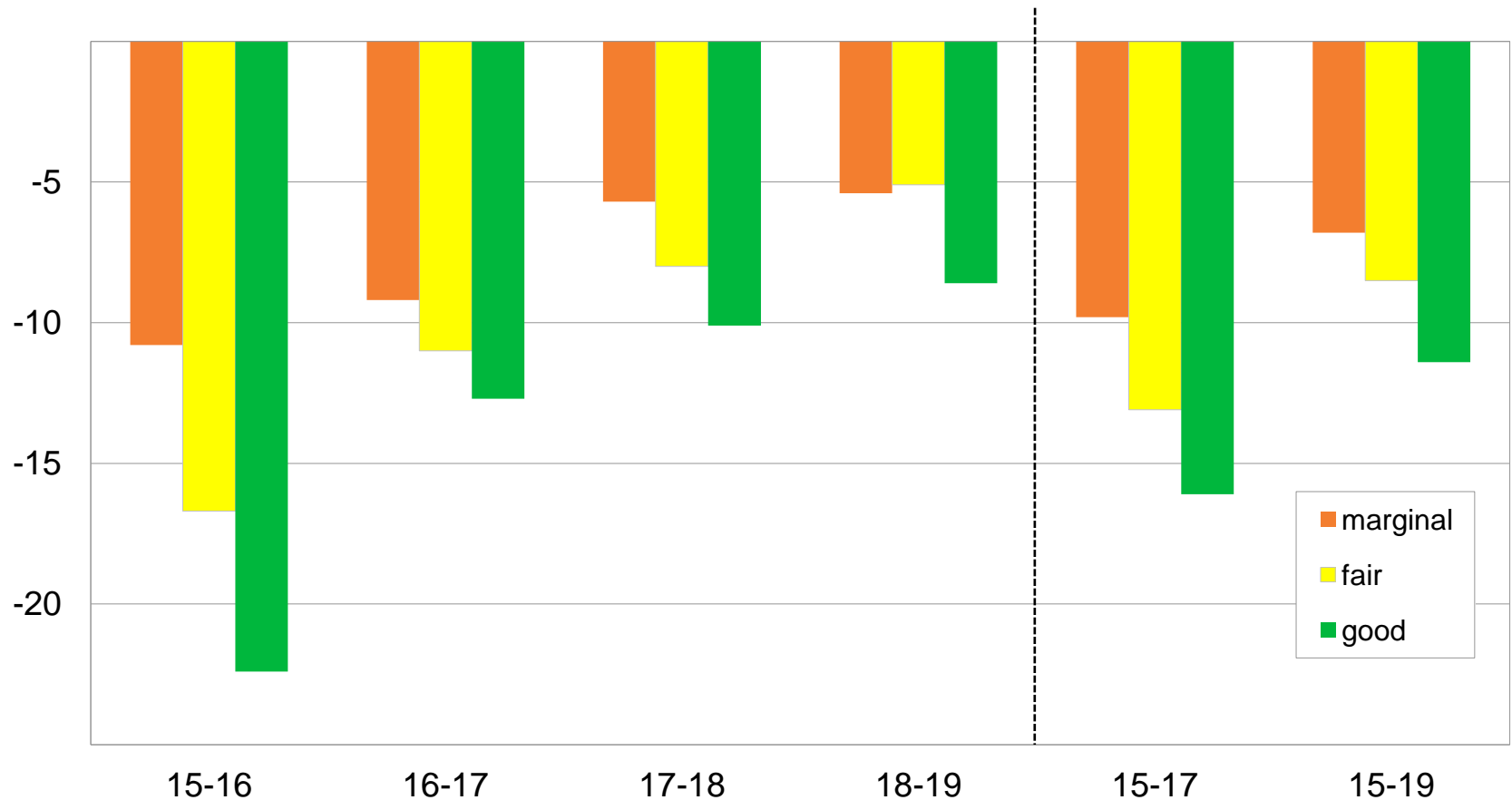
Compared with states that have poor graduated licensing laws





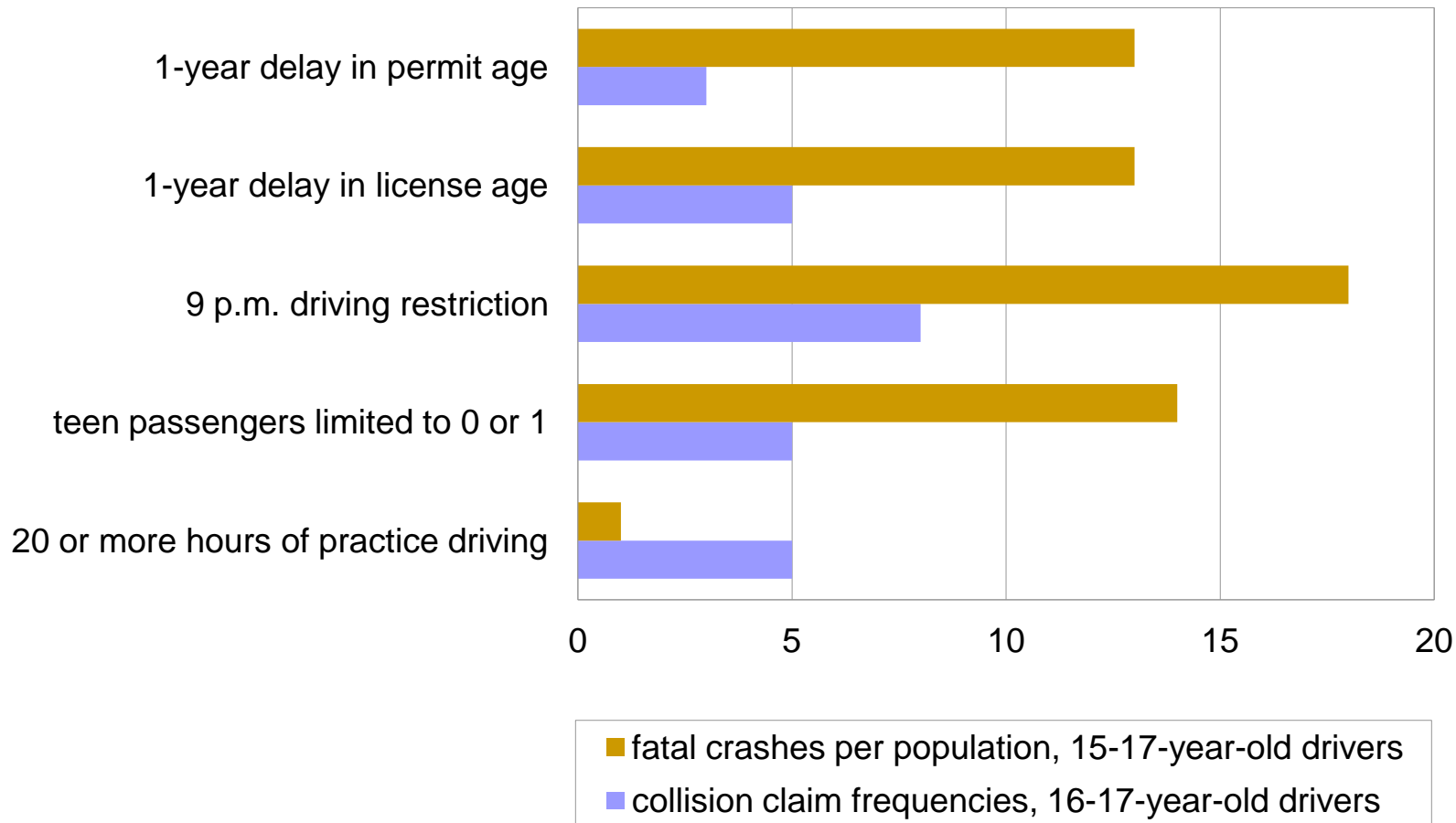
# Predicted percent change in collision claim frequencies

Compared with states that have poor graduated licensing laws, by rated driver age



# Percent reduction in teenagers' crash rates

By graduated licensing component

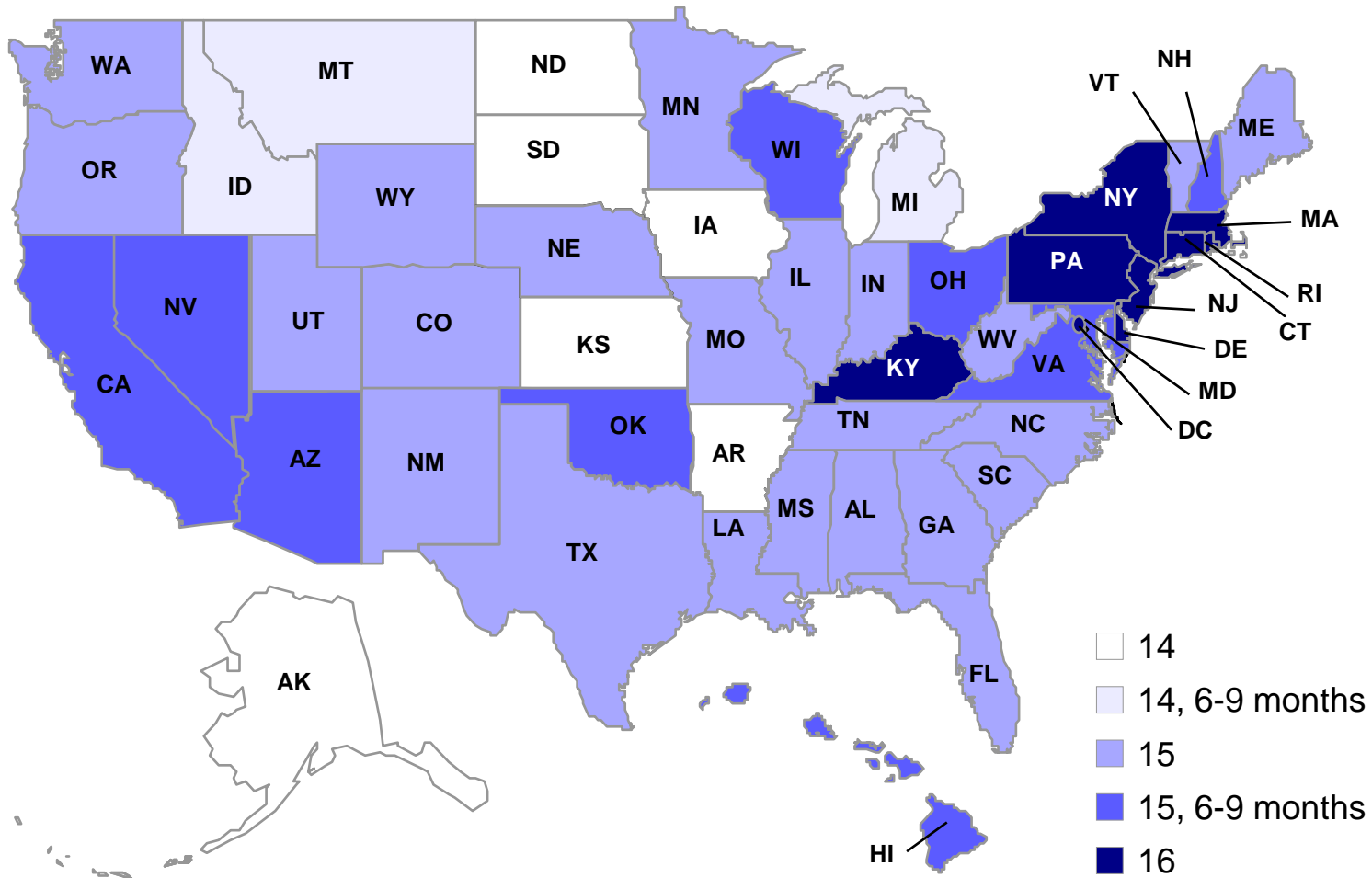


# Encouraging states to improve graduated licensing systems

- Rating state systems
  - Advantage: straightforward result (good, fair, marginal, or poor)
  - Disadvantage: does not encourage good states to improve
- Potential crash reductions from strengthening components even in the best states

# Minimum permit age

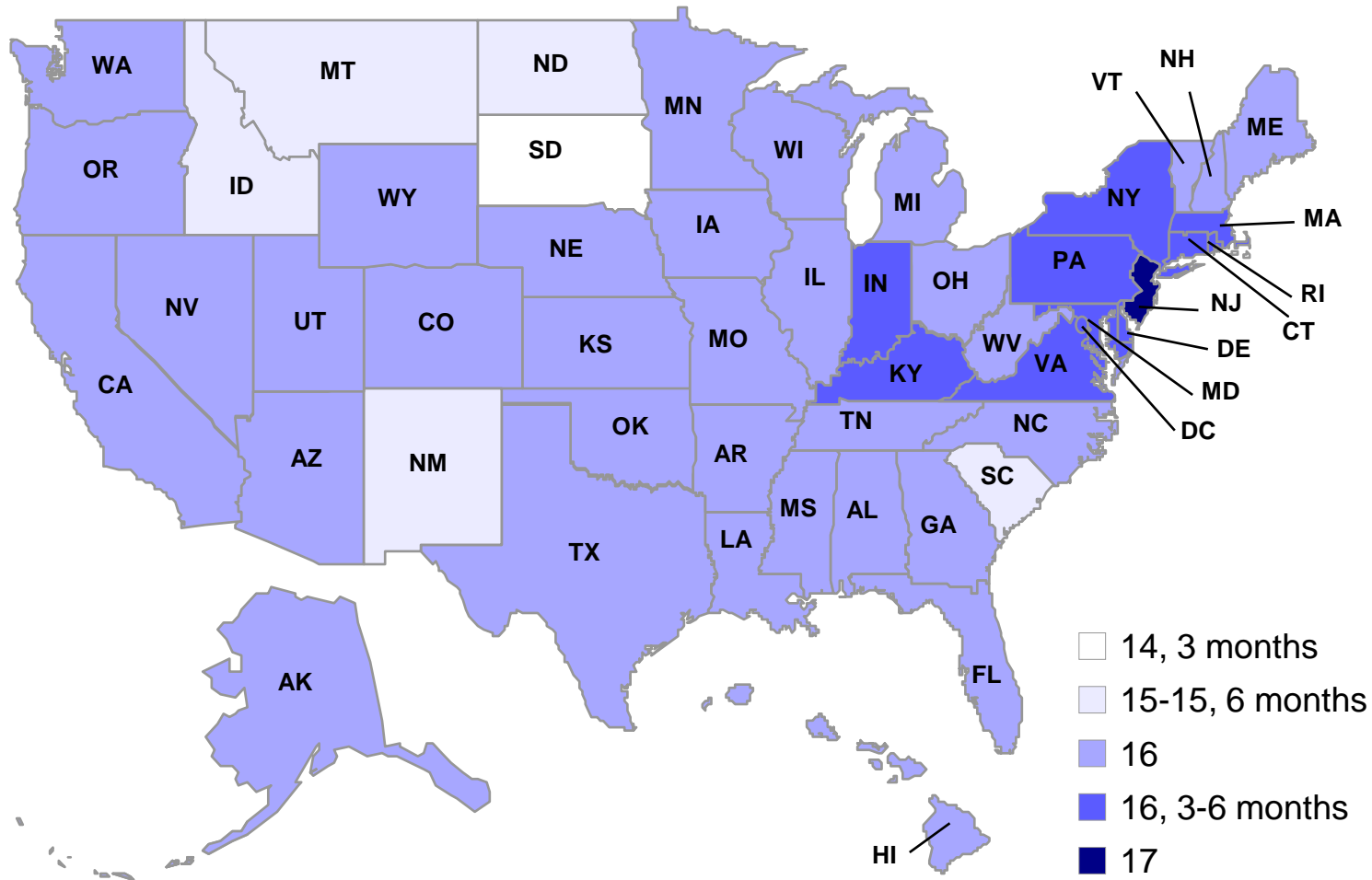
June 2012





# Minimum age for intermediate license

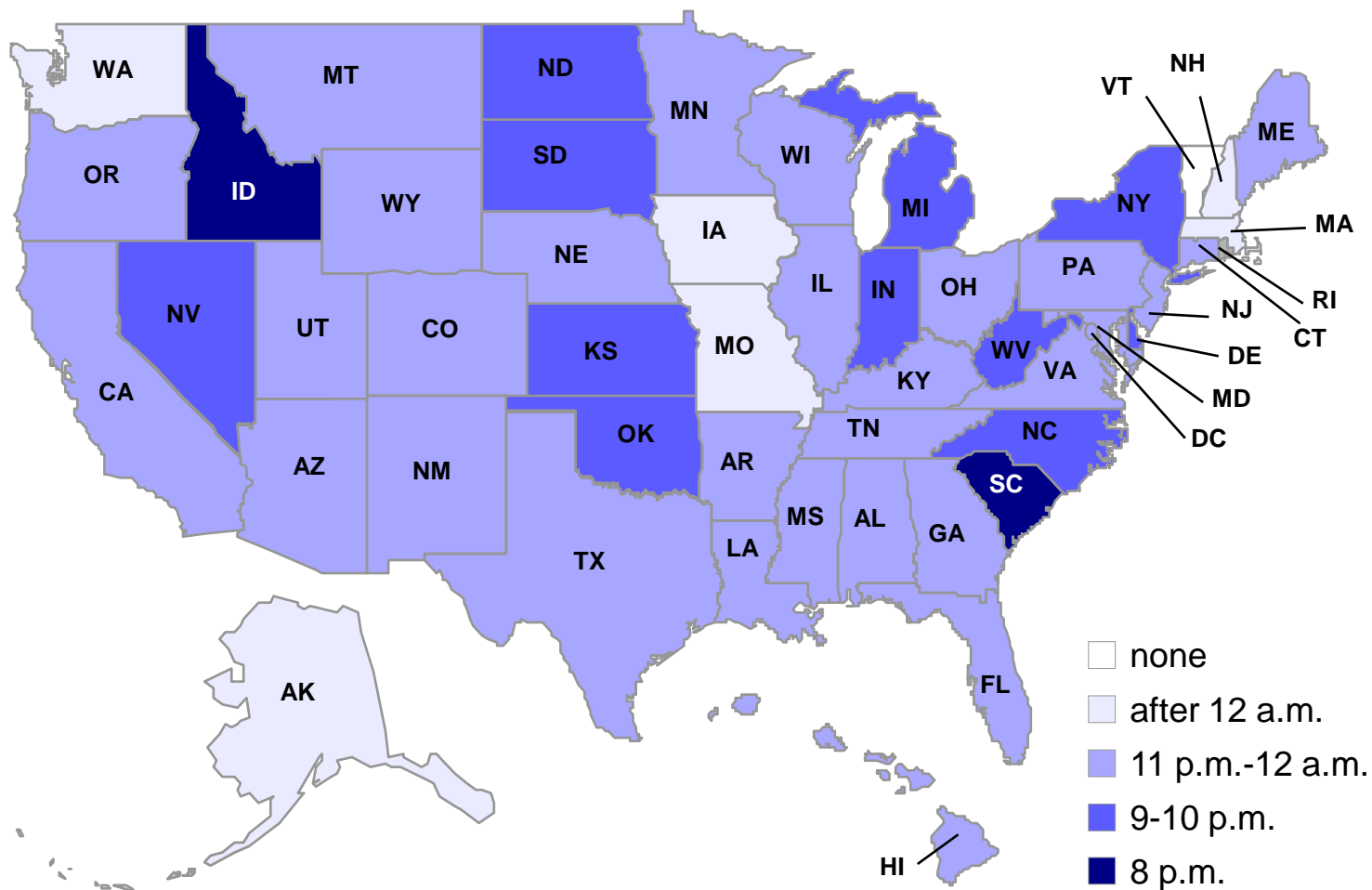
June 2012





# Night driving restrictions

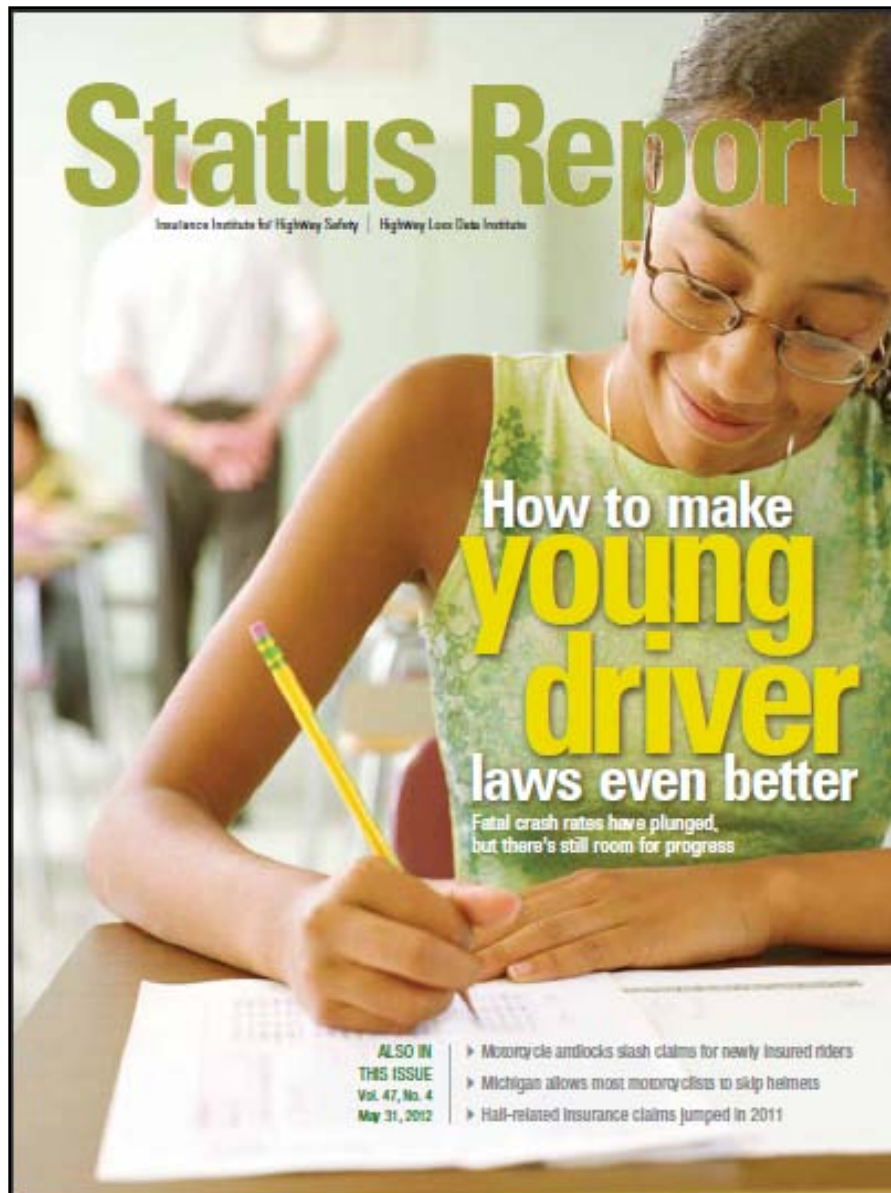
Earliest start time, June 2012





# Status Report

May 31, 2012



# GDL calculator

- Estimates effects of given improvements
- Overall crash reductions based on improving all five components
- “Match the best” feature permits state to see benefits of matching strongest provisions

## Match the best

An online calculator shows states how to reduce rates of fatal crashes and collision claims among teenage drivers by adopting some or all of the best GDL provisions in force today.

[www.iihs.org/gdl](http://www.iihs.org/gdl)

### Best GDL provisions by state, May 2012

**Permit age of 16**  
Connecticut  
Delaware  
District of Columbia  
Kentucky  
Massachusetts  
New Jersey  
New York  
Pennsylvania  
Rhode Island

**65 practice hours**  
Pennsylvania

**Licensing age of 17**  
New Jersey

**8 p.m. night driving restriction**  
Idaho (parent to work)  
South Carolina (5 p.m. to 7 p.m.)

**No teenage passengers**  
Alaska Maryland  
California Massachusetts  
Colorado Nevada  
Connecticut Oregon  
D.C. Utah  
Georgia Vermont  
Indiana Washington  
Maine West Virginia

**Overall**  
South Dakota  
37%  
Fatal Crashes  
63%  
Collision Claims

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**PERMIT AGE**  
Iowa: 14 years 9 months to 16 years  
Collision Claims: 7% reduction  
Fatal Crashes: 24% reduction

**PRACTICE HOURS**  
New Jersey: 0 hours to 65 hours  
Collision Claims: 18% reduction  
Fatal Crashes: 4% reduction

**LICENSE AGE**  
South Dakota: 14 years 3 months to 17 years  
Collision Claims: 33% reduction  
Fatal Crashes: 32% reduction

**NIGHT DRIVING**  
Alaska: 10:00 p.m. to 8:00 p.m.  
Collision Claims: 5% reduction  
Fatal Crashes: 12% reduction

**PASSENGERS**  
North Dakota: 1 teen or more to None  
Collision Claims: 5% reduction  
Fatal Crashes: 21% reduction

**Permit age:** One-way states can reduce teen crashes and deaths by raising the minimum permit age. The older teens are when they get their permits, the lower their crash risk. Iowa allows 14-year-olds to get learner permits. Raising the age to 16 would help save lives.

**Practice hours:** Most states require a minimum number of supervised practice hours before learners can progress to an intermediate license. Requiring more practice reduces the number of collision claims filed for novice drivers. New Jersey doesn't have a practice driving requirement.

**License age:** The older teens are when they become eligible for a license, the fewer fatal crashes there are. South Dakota licenses at 14 years 3 months. Raising the age to 17 would reduce fatal crash rates among young drivers by 32 percent and insurance collision claims by 13 percent.

**Night driving:** Most states restrict teens in the intermediate stage of licensure from driving without adult supervision at night. Starting times vary. Restrictions work best if they begin at 10 p.m. or earlier. Alaska's doesn't start until 1 a.m.

**Passengers:** When novice drivers travel with other teens in their car, fatal crash risk increases. Most states limit passengers for unsupervised intermediate-stage drivers. North Dakota doesn't restrict teen passengers. The state could sharply reduce fatal crashes by prohibiting all teens.

**Overall:** The sizable payoff of adopting all the best provisions is huge for states such as South Dakota, which has lots of room to improve.

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## Young driver licensing systems in the U.S.

[Overview](#)

[Learner stage](#)

[Intermediate & unrestricted stages](#)

[All stages](#)

[By state](#)

[Calculator](#)



For every state and D.C., the Institute has estimated the effects of strengthening or weakening 5 key GDL provisions: permit age, practice driving hours, license age, and night driving and passenger restrictions. The projections are based on research showing what matters most when it comes to preventing fatal crashes and collision claims among teen drivers.

This calculator uses the results of that research to show how changes to state provisions might affect collision claims and fatal crash rates among young drivers. To get started, select a state from the list below.

**Choose your state:**

[Select] ▾

**Best GDL provisions by state as of May 2012**

**Permit age of 16:**

Connecticut

Status Report, Vol. 47, No. 4, May 31, 2012 — Cover story: How to make young driver laws even better (PDF)

News release, May 31, 2012: States could sharply reduce teen crash deaths by strengthening graduated driver licensing laws

Research papers:

Graduated driver licensing laws and insurance collision claims frequencies of teenage drivers (PDF)

Graduated licensing laws and fatal crashes of teenage drivers: a national study (PDF)

# Conclusions

- National studies have shown the beneficial effects of strong GDL systems on crash rates, yet there is still room to improve
- GDL calculator can be used to estimate effects of specific changes for states:
  - Permit and licensing age delays
  - Strong night driving and passenger restrictions on beginning drivers
  - An increase in the number of required practice hours

# For further information

[www.iihs.org](http://www.iihs.org)

- Fatality Facts
- Q&As
- State laws
- Consumer brochures and videos

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## Teenagers

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### Fatality Facts: Teenagers

- [2010](#)
- [2009](#)
- [2008](#)
- [2007](#)
- [2006](#)
- [2005](#)

### Q&As

- [Teenagers: general](#)
- [Teenagers: graduated driver licensing](#)
- [Teenagers: underage drinking](#)

### State laws

- [Licensing systems for young drivers](#)

### Informational videos

- [In-vehicle teen driver monitoring](#)

### Consumer video available for purchase

Young drivers: the high-risk years — Car crashes are the number one killer of teenagers, and the risk is much greater for 16 year-olds than for other teens. This video documents the problem, describes a program that's saving young people's lives, and tells what parents can do to minimize the risk for their children.

### Consumer brochure

[Beginning teenage drivers \(Also available in Spanish\)](#) — facts about young drivers and the licensing programs that protect them while learning to drive



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