

A PEER-TO-PEER TRAFFIC SAFETY PROGRAM FOR AMERICA'S YOUTH





Outline of Presentation

- Brief overview of TTI
- The top risks for young drivers
- TDS Program history, funding and status
- Does the program seem to be working ?
- Program characteristics/best practices and resources



Texas A&M Transportation Institute

- Established in 1950
- 10 statewide office locations (Texas)
- Work throughout the U.S.
- 2 international offices
- 9 research centers of excellence
- Approx. 700 staff
- 30 % of which are grad/undergrad students involved in research projects & tech support
- FY 2013 operating budget: \$62.4 M

TOO MANY YOUNG PEOPLE ARE DYING

- **Motor vehicle crashes are the #1** cause of injury and death for youth in America
- About **3,500** teens per year are killed in traffic crashes in the U.S. and nearly **500,000** are injured

(Source: NHTSA, *Traffic Safety Facts*, 2010)

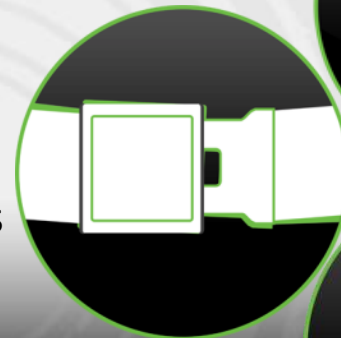


Highest Risks for Teen Drivers

Driver inexperience, *coupled with the following situations / conditions:*

1. Driving at night / tired
2. Speeding and street racing
3. Distractions, such as cell phones/texting and other teen passengers
4. Low seat belt use
5. Driving under the influence of alcohol and/or drugs

(Source: National Safety Council, 2007)



Adolescence



off the mark by Mark Parisi www.offthemark.com

ANATOMY OF A TEENAGER'S BRAIN

THE BIRDS AND THE BEES LOBE

REBELLION CENTER

SUPERTURBO REBELLION CENTER

SELF IMAGE

INTERNET PHONE ADDICTIONS

PRONE TO BRUISING

FITTING-IN GLAND

EVERY EPISODE OF THE SIMPSONS

PEER PRESSURE RESISTANCE

INDESTRUCTIBILITY CORTEX

SLAM DOOR REFLEX

CAR KEYS CRAVING

ABILITY TO BE SEEN IN PUBLIC WITH PARENTS

ALL THE ANSWERS

LOVE FOR PARENTS

SLAM DOOR REFLEX

DISDAIN FOR PARENTS

MEMORY FOR MUSIC

"COOL" GAUGE

PERSONALITY

GLUCAGON

SLANG DECODER

JUDGEMENT GLAND

MEMORY FOR CHORES, HOMEWORK, ETC.

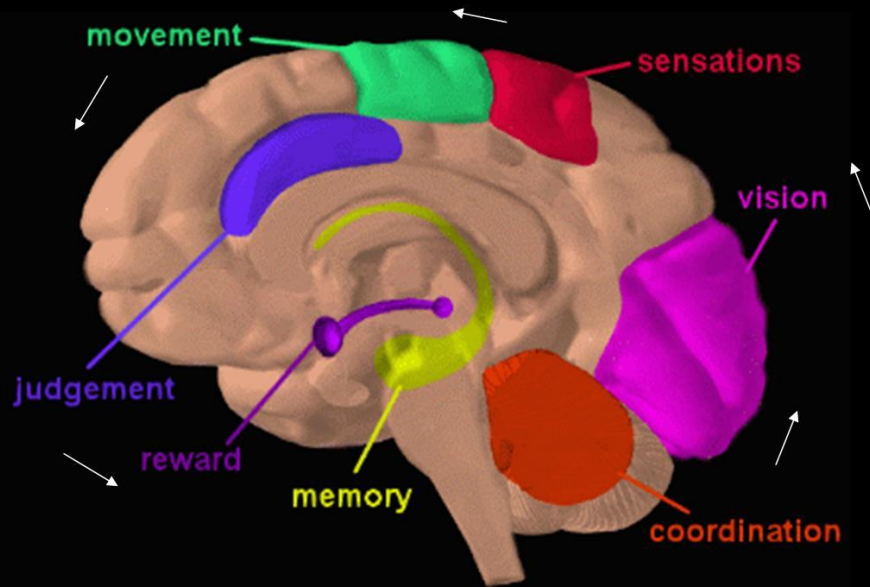
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Drug Prevention Resources, Inc.



The Teen Brain

DEVELOPMENT TIMELINE



See "What Makes Teens Tick?" by Claudia Wallis in *Time Magazine*, May 10, 2004

The brain develops from back to front.

Drug Prevention Resources, Inc.

The Science of Brain Development

Frontal lobe (prefrontal cortex)
responsible for:

- Executive decision making
- Impulse control
- Overriding/suppressing unacceptable social responses
- Frontal lobe does not fully mature until age 25
- ***Teens are at a very real, fundamental disadvantage***





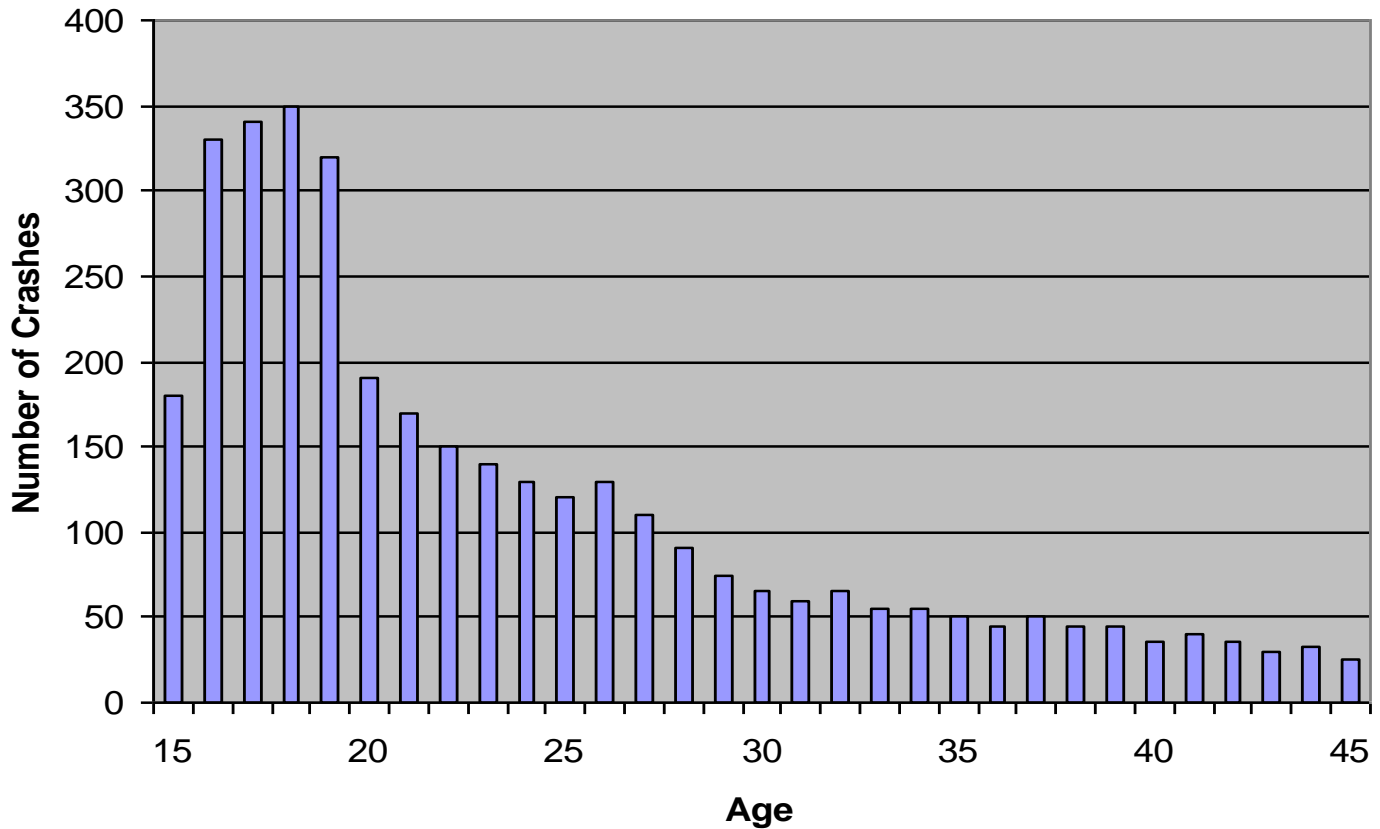
- Teens need more sleep
- National Sleep Foundation recommends 9.25 hours
- Source: National Sleep Foundation, 2008
- Average teen in U.S. is getting 6.9 hours
- Average teen driving at 11 p.m. is impacted (by fatigue) the same as if they were drunk.

Source: "Asleep at the Wheel", *Sleep Review Magazine*, Drobrich and Rancourt, October 2007





Distribution of Driver "Fall Asleep" Crashes by Age



NCHRP Report 500, Volume 19, 2007: A Guide for Reducing Collisions Involving Young Drivers

Teen Driver Fatigue

- 55% of all sleep related crashes involve drivers 25 years and under
Source: DrowsyDriving.org, 2008
- 30% of teens report they fall asleep in class at least once per week
- In 2006, more than half of teens admit to of driven drowsy.

Source: National Sleep Foundation, *Sleep in America poll*, 2006, drowsydriving.org, 2008)

POLITICALLY CORRECT By Jim Huber



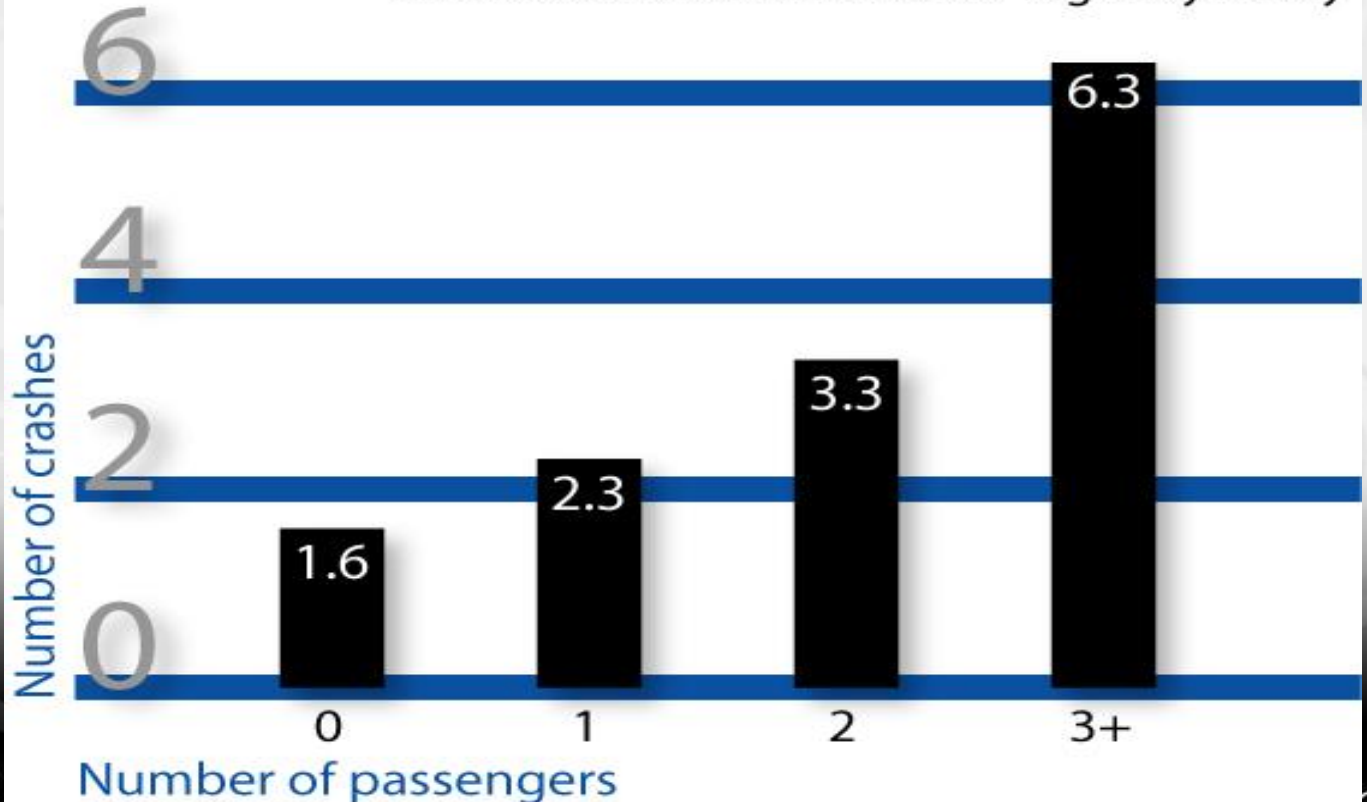


Impact of Teen Passengers on Teen Drivers

Crash Rates by Passengers

ages 16-17, per 10,000 trips

Source: Insurance Institute for Highway Safety



Cell phones & Texting

- Drivers talking on a cell are 4 times more likely to be in a crash; no difference if hands-free (Source: New England Journal of Medicine)
- Texting is the new DWI -“intexticated”
- Drivers who text are 23 times more likely to be involved in a crash (Source: Cohen & Graham, 2003)
- Texting impacts all three of the primary driving function needs: cognitive, manual and visual – described as “the perfect storm”



Speeding

- Accelerating from 30 mph to 60 mph **quadruples** the distance needed to stop.
(IIHS)



- When teens drive with other teen passengers, they tend to drive faster. (National Institute Health and Westat)



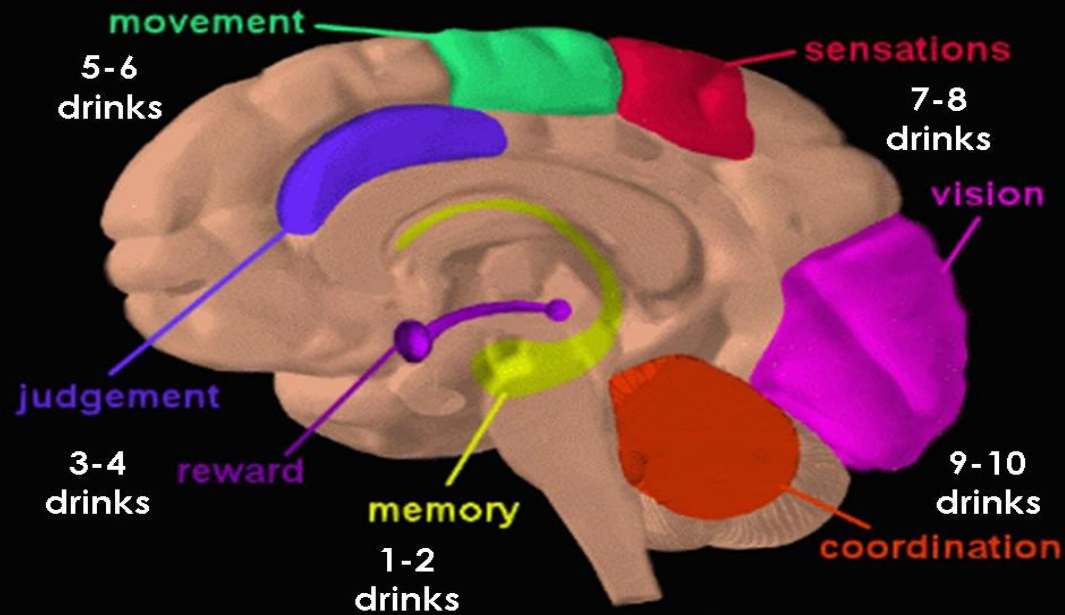
Speeding

- **Male drivers** are **more likely** than those of female drivers to be involved in a **fatal crash** that is speed-related. (NHTSA 2008)
- In 2008 **24%** of all male drivers involved in fatal crashes were speeding at the time of the crash, compared to **15%** of all female drivers. (NHTSA 2008)



Impact of Alcohol on Teen Brain

DEVELOPMENT TIMELINE



Alcohol affects the brain from front to back.



Program Catalyst: Series of Crashes in 2001 in San Antonio, Texas

- 10 teen deaths in 6-week span
- Four separate crashes
- Knee-jerk reaction was need for more/stricter laws; teens were stupid & probably drunk
- Alcohol was not involved in any of the crashes
- Evidence that peer-to-peer influence had been effective for reducing smoking & teen pregnancy



INVOLVING TEENS IS CRITICAL

“Tell me something, and I’ll forget.

*Show me something, and I may
remember it.*

Involve me, and I’ll understand.”

Chinese Proverb





A PEER-TO-PEER PROGRAM: ACTIVE ELEMENTS

- High school (since 2002)
- Junior High (added in 2010)
- University (added in 2012)





REACH

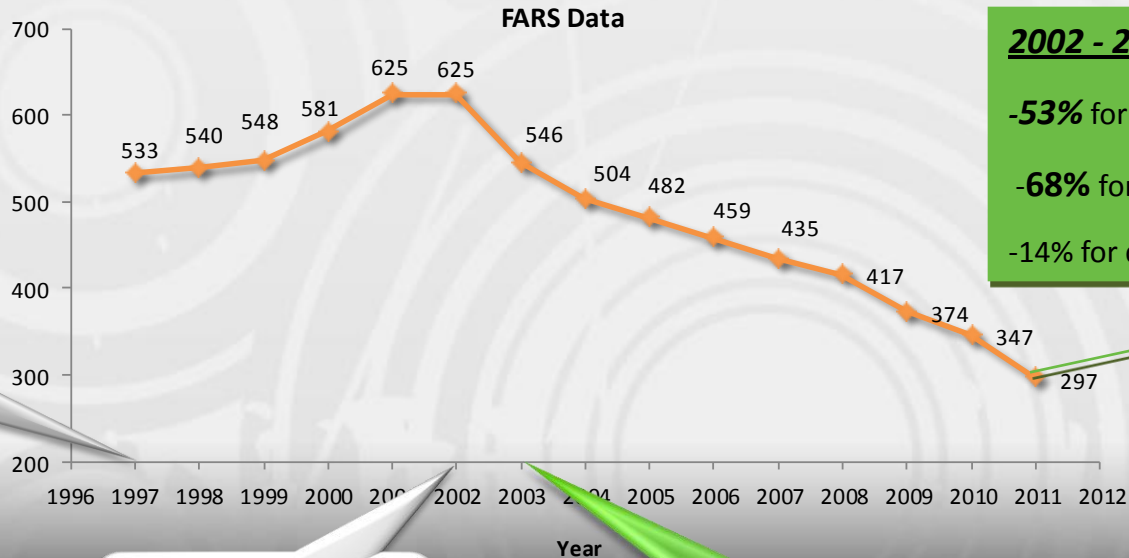
- 600+ high schools and 500,000+ teens to date
- Also active in CA, CT, GA, NC, NE & MT





TEEN TRAFFIC FATALITY TRENDS / BENCHMARKS IN TEXAS

16-19 Year - old drivers involved in fatal crashes in Texas



2002 - 2011
 -53% for 16-to-19 year olds
 -68% for 15-to-17 year olds
 -14% for drivers 25+ years old

1995
On- Road
Driving Test
Removed

Parent Taught
Driver Ed
Implemented

GDL Implemented

Teens in the Driver
Seat® Implemented





Rigorous Statistical Analysis

- Detailed comparison group analysis, selected to control external causal factors and maturation problems
- Outcome is unbiased estimate of safety impacts of the (TDS Program) treatment and its variance
- Analysis done at county level for crashes involving injuries and fatalities (combined); 10 counties “with” vs. 10 counties “without”
- Results
 - TDS producing average crash reduction of 14.6%
 - Statistically significant at the 99.9% level
 - 95% confidence interval of 6.4% to 23.0% reduction in crashes



Recent Press Release by GHSA

- Preliminary data for first half of 2012 show
 - General trend of national decrease in fatal teen crashes is over
 - Average increase of 19 % in fatal crashes involving teens age 15-17
- Handful of states still showing continued decline
 - Texas & Georgia are two of those states (10+ % decrease)
 - Texas & Georgia have large, long-standing footprint of TDS Program



National Safety Council



TDS Awards

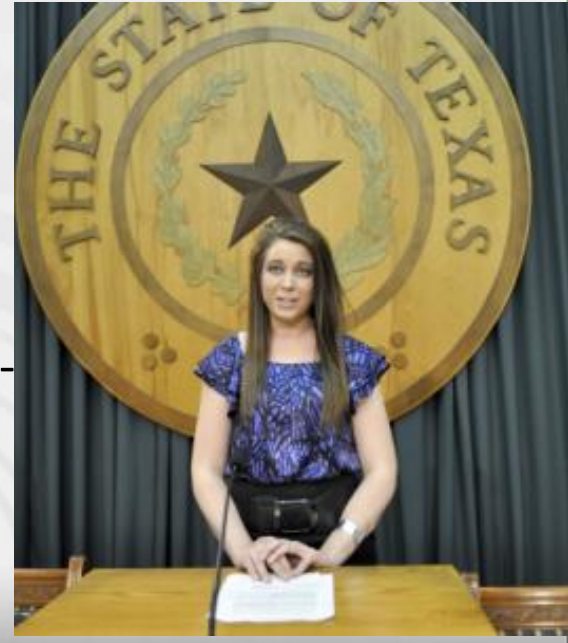
- Governors Highway Safety Association, Peter O'Rourke Safety Award
- ITE Transportation Achievement Award for Safety
- 6 major national awards in last 6 years
- Identified as "national best practice for safety", 4 years in a row





Best Practices for the TDS Program

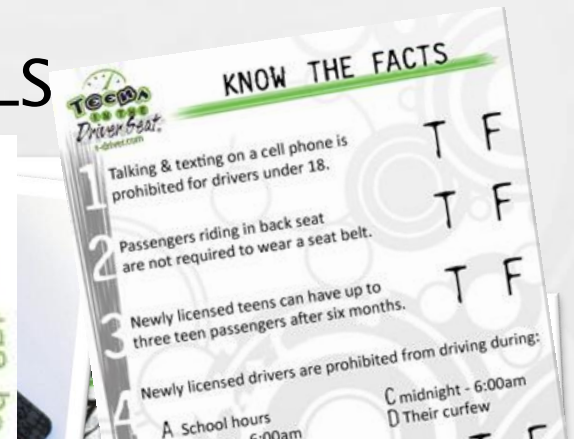
- Variety of resources to leverage (not prescriptive)
- Addresses all top risks (not just one)
- Facilitate and encourage ongoing outreach (e.g., activity calendar/planner, TDS Cup)
- Provide incentives: TDS Cup, annual contest, teacher-sponsor support kit, Teen Advisory Board
- Establish relationships with student organizations & partners
- Media events





TEENS IN THE DRIVER SEAT® TOOLS

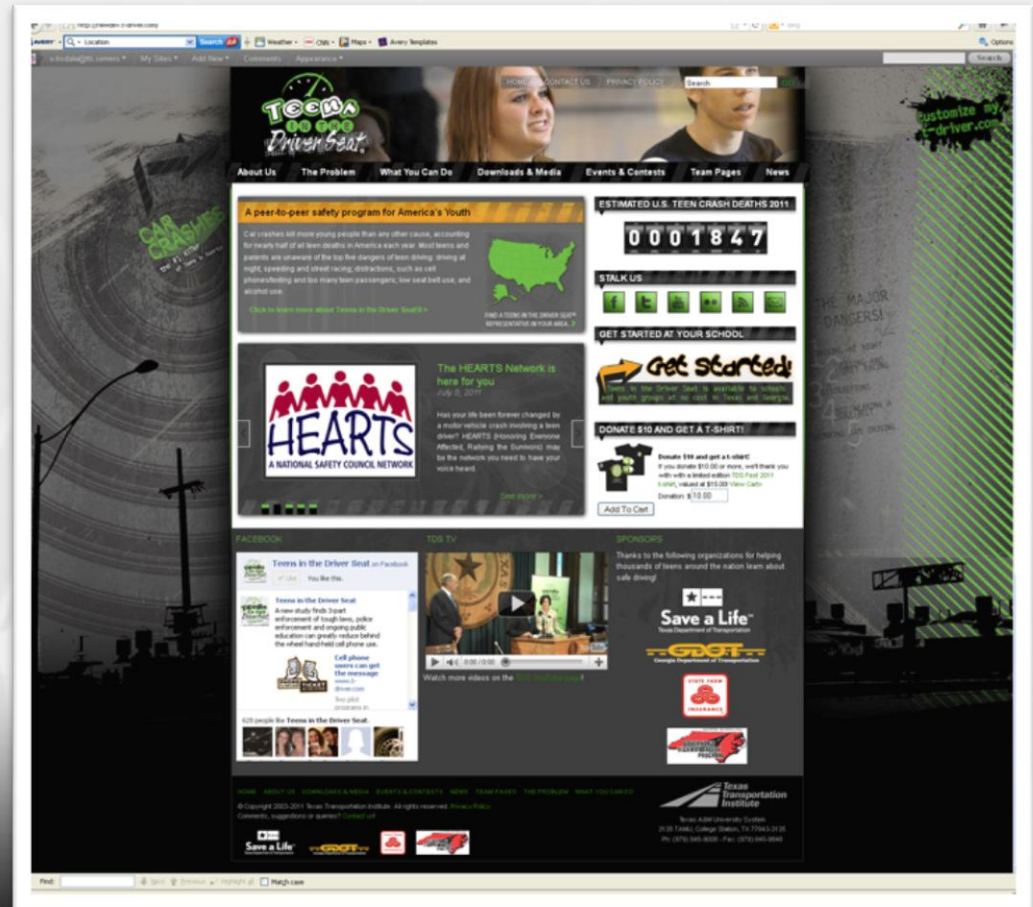
- Web site: t-driver.com
- Team t-shirts
- Logos, artwork
- Downloadable posters
- How-to guide
- Educational items
- Activity ideas / resources





T-DRIVER.COM

- Safe driving articles, stats, and facts
- Contests and Events
- Team Pages
- Downloadable videos, posters and media
- Activity ideas
- Order Forms
- Testimonials, stories





Safe Driving Pledge



Use promo items to remind friends of pledge





Partnering with Student Organizations

- Connect with FCCLA, Student Council and/or others organizations
- Participate in their regional/statewide meetings





PROGRAM CONTACT

Program Director

Russell Henk

(210) 979-9411

r-henk@tamu.edu