

July-September 2019 Issue 1 Keystone CTSP Published through a PA HSO PennDot Grant and the IUP IRHS Novice Statewide Driver Program <u>PA HSO:</u> Chris Swihura, CTSP Program Manager Christy Timbrell, HSO Project Administrator

#### NDSP IUP/IRHS:

Louis Pesci, Ed.D. Project Director Timothy J. Runge, Ph.D. SWPBIS Coordinator Kathleen Ammerman, Asst. SWPBIS Kevin Wolford, Project Coordinator



#### Inside this issue:

Welcome!	
IUP Institute for Rural Health and Safety	
NDSP-Who We Are	
Novice Driver Statewide Pro- gram-What Is It?	
Novice Driver Program- CTSP Role	

Roadway Safety Data and GIS

6

2

2

3

4

5



### Welcome!

Welcome to the initial issue of *The Keystone CTSP Newsletter* This is a quarterly informational newsletter directed to the CTSP network throughout the Commonwealth.

This newsletter is published as a segment of an PennDOT HSO grant funded by NHTSA. The IUP Institute for Rural Health and Safety in conjunction with the PA Department of Education and PennDot, are committing this effort toward our common goal of improving teen driver safety. The *Novice Driver Statewide Program* is focused on increasing seatbelt use and reducing distracted driving through the use of the evidence-based educational approach of *SWPBIS (School Wide Positive Behavioral Interventions and Supports)*, and the methods of the *Perceptual Driving Curriculum*.

This program is intended also to develop standardized community and educational interaction programs that will display evidence-based results with best practices. One method of achieving this will be through increasing networking and communications opportunities between CTSP and public school driver education programs.

Throughout this newsletter, you'll learn more about more about the grant, our team, and of the activities and approaches proposed through this program. There are links to articles and sites that should be of interest. I am looking forward to working with you and gaining your insights, contributions and input toward our common goal.

Kevin Wolford,

Coordinator Novice Driver Statewide Program: CTSP Profiles

# **IUP Institute for Rural Health and Safety**

The IUP Institute for Rural Health and Safety (IRHS) began in



sion is to bring together university personnel from various disciplines and professional backgrounds to assist transportation organizations in solving problems related to traffic safety, while maintaining the values of good transportation. Applying university resources toward traffic improvement, the IUP Highway Safety Center is a liaison between university personnel and state and local officials; business, industrial, and professional interests; and other groups and individuals. The Center's program encompasses activity in five major areas: Research, surveys, and studies; Education (teaching); Training and conferences; Field and extension services; and Traffic safety communications and information exchange Within these areas, the Highway Safety Center offers the following: Increase awareness of traffic safety issues in the counties of Armstrong, Butler, Clarion, Indiana, and Jefferson; First-responder,

emergency medical technician, paramedic, and CPR training; Driver improvement programs for police officers, ambulance personnel, and the public; Undergraduate and graduate courses in driver education; Industrial fire brigade and emergency response team training; and Driver improvement programs for private fleets.

Find out more about us-

On Facebook:

IRHS IUP

On the web: IUP-IRHS

**Kevstone CTSP** 

## **IRHS Novice Driver Statewide Program — Who We Are**

The IRHS mission is to bring together university personnel from various disciplines and professional backgrounds to solve problems related to rural health and safety. Drawing on our mission and the Federal Highway Administration's (FHWA) 4 E's of highway safety - engineering, education, enforcement, and emergency medical services, IRHS has created a multidisciplinary team of university personnel. The team includes:

Education: Project Director, Dr. Louis Pesci, IRHS executive director and assistant professor in Department of Kinesiology, Health and Sport Science and instructor of preparation courses for teachers of driver education

• Project Coordinator: Kevin Wolford, Safety/ Driver Education, IRHS Driving Instructor

Behavior: Project Coordinator SWPBIS, Dr. Tim Runge, IRHS affiliate and professor in Department of Educational and School Psychology

Assistant Coordinator SWPBIS: Kathleen Ammerman, M. Ed., Educational Psychology, B.S. Psychology, School Psychology Ph.D. student

Emergency Medical Services: Chuck Allias, IUP Paramedic Program director

## The Grant Team

Associate Professor at Indiana nationally certified school psy-University of Pennsylvania in the Kinesiology, Health and Sport Science Department. Since 1997, Dr. Pesci has worked for the IUP Institute for Rural Health and Safety (formerly the IUP Highway Safety Center). In 2010, he became the director of the IUP Institute for Rural Health and Safety. Since 2000, Dr. Pesci has taught the core of Safety/Driver Education teacher preparation courses at IUP and specializes in teaching the IUP Driver Perceptual Program to police officers in He just completed a grant with the state of Pennsylvania and other large fleet companies. Dr. Pesci has presented at over 20 conferences on traffic safety and health-related issues. Dr. Pesci has served as the principal investigator on over 20 external funding awards, which include both state/federal fees-forgrants, service, and contracts ranging from traffic safety programs to health-related issues. He has been the recipient of the IUP Outstanding Centers & Institutes Award, the IUP Sponsored Programs Award for Outstanding Achievement in Public Service Award and twice the recipient of the IUP President's Grantsmanship Award.

chologist with 10 years of experience working in public schools. He is currently Professor and Chair of the Educational and School Psychology Department. Dr. Runge's scholarly interests include School-Wide Positive Behavioral Interventions and Supports (SWPBIS). Dr. Runge has received 10 annual contracts with the Pennsylvania Department of Education to evaluate the implementation of SWPBIS in over 800 Commonwealth schools. the U.S. Substance Abuse and Mental Health Services Administration's Safe Schools / Healthy Students project which focused on the efficacy of school-based mental health services. His scholarly output includes 8 peerreviewed empirical articles, 16 technical reports, and over 20 conference presentations. The majority of his scholarly work has focused on SWPBIS outcomes for students and schools. Dr. Runge is regarded as a national expert on SWPBIS implementation.

Louis Pesci, Ed.D., is an | Timothy Runge, Ph.D., is a | Kevin Wolford, B.S.Ed., is | Kathleen Ammerman, B.S. the Project Coordinator Novice Driver Statewide Program/CTSP Pennsylvania educator 1979, with certifications in Safety/Driver Ed., Technology Ed., and Art. As a public school, I.U. and IUP/IRHS Center for Transportation, driving instructor, Wolford has been involved in all phases of driver education, and end-of-skills license testing. Aside from driver education, Wolford has taught, and developed curriculums in computer applications, graphic design, and secondary art. With experience in the Perceptual Driving and Driver Proficiency Programs, Wolford had worked for the IUP Highway Safety Center as an adjunct instructor in the in-car application phase of the teacher education program.

> Wolford has provided services for ETS Testing as a content contributor and evaluator for the PRAXIS Driver Education Certification Exam. Wolford is a past a member of PASE and ADTSEA. Fire service training in hazardous materials response, and basic vehicle rescue along with involvements in job safety teams complete his background.

Ideas for articles, links, stories or other related contributions can be submitted to: kwolford@iup.edu

M.Ed., is a second-year school Profiles. An IUP graduate and psychology PhD student in Edsince ucational and School Psychology. She has been Dr. Runge's graduate assistant on the PA SWPBIS and Youth Mental Health First Aid projects since fall 2017. Ms. Ammerman has previous research experience working with Dr. Elissa Newport's Center for Brain Plasticity and Recovery at Georgetown University and other research laboratories at The Pennsylvania State University. Ms. Ammerman has presented results of her research at regional and state conferences.



### <u>Check It Out</u>

### <u>Chicago</u> Tribune

<u>Lake County</u> <u>driver safety</u> <u>campaign</u> <u>seeks to avoid</u> <u>scare tactics</u>

<u>The Verge</u> <u>Autonomous</u> <u>Cars</u>

# Modern Kids

<u>How to keep</u> <u>teen drivers'</u> <u>eyes on the</u> <u>road, and</u> <u>their fingers</u> <u>off the</u> <u>keyboard</u>

## <u>fun easy</u> popular

<u>How to create</u> <u>change one</u> <u>behavior at a</u> <u>time</u> How to Keen

<u>How to Keep</u> <u>Your Traffic</u> <u>Safety</u> <u>Program from</u> <u>Putting People</u> <u>to Sleep at the</u> <u>Wheel</u>

## Novice Driver Statewide Program — What Is It?

The Novice Driver Statewide Program is a federally funded grant program designed to address the safety focus areas of improving teen driver/novice driver safety through increasing seatbelt use and reducing distracted driving in teens through proven educational approaches.

The problem areas as identified in this grant through data derived from the Pennsylvania Crash Information Tool for 2017, and information from the 2015 report of Arthur Goodwin, et al., in the 8th edition of *Countermeasures that Work*, statistically show the overrepresentation of teen driver involvement in all crash types.

Specifically, the traits of young drivers in risk taking behavior when combined with inexperience in driving mechanics and lack of risk perception skills are the main targets of this program. It is stated in the grant that "'Education' and 'behavior' are not always the same." One can "know", but still not apply that knowledge through correct behavior.

The physical mechanics of driving can be taught but may receive much of the attention. The Perceptual Driving Program has been a part of the PA Enhanced Driving Curriculum for many years, but with an unknown extent to its use in state driver education courses. As one task of this grant, surveys to driver education instructors and participating students will provide data as to the extent, fidelity and efficacy of the use of the curriculum. Revising and utilizing the *Perceptual Driving Program* to a greater and more successful degree stands as a main undertaking. This includes the addition of segments on distracted driving and restraint use, along with updated videos, and format.

The revised *Perceptual Driving Program* curriculum will be distributed and used initially by four target programs whose schools have implemented the use of SWPBIS. Observational data will be collected throughout the year from the participating schools to evaluate projected outcome data.

The Perceptual Driving Program is probably more familiar to the majority of traffic safety professionals than the acronym, SWPBIS. Highly organized in its data system and scope, SWPBIS (School Wide Behavioral Interventions and Supports) very basically, is teaching specifically stated behaviors. These rules of compliance are taught, and reinforced positively through a recognition system. Compliant students who consistently perform the correct, taught behaviors are rewarded, while noncompliant students may be re-taught or corrected through specific strategies or, depending on severity, move into another level of supports or interventions.

This format should work well with perceptual driver education, especially with behind the wheel instruction in which the specific lesson objectives and behaviors.

> pennsylvania DEPARTMENT OF TRANSPORTATION

**Feedback and Comments** 

Chris Swihura, CTSP Program Manager

#### cswihura@pa.gov

Christy Timbrell, HSO Project Administrator ctimbrell@pa.gov

TUP

Kevin Wolford, Coordinator CTSP Profiles

kwolford@iup.edu

## Novice Driver Statewide Program — The CTSP Role

Through this grant, the PA HSO is looking to accomplish several objectives with the CTSP. These are some of the tasks that will play major roles in attaining these goals. In meeting with HSO officials, it was evident that the overall goal is to begin creat-

ing more standardized approaches to providing evidence-based educational programs that are data-driven to track the efficiency of the presentations. Consensus, was that there are some presentations that although are engaging to the audiences, do not provide long-term measurable educational experiences or long-term results.

One of the first tasks is to provide a communications network to deliver the sharing and exchange of information concerning developments in driver education, trends in behavioral research, and relative crash data to the CTSP offices.

That is being done via this quarterly newsletter, as well as connections through social media and other methods.

An electronic survey interview will be distributed shortly to assess common practices and outreach methods, programs, presentation types, audiences, and working relationships with other safety-oriented or community organizations and schools, especially with driver education programs .

Ultimately, the intention is to involve the role of CTSP programs more into educational roles, increase interactions with driver education programs and parents by using evidence-based programs and methodologies, to develop resources and new pro-



grams, and broaden collaborations with other comparable service organizations.

In working with driver education programs, we will be focusing on the *Perceptual Driv*- *ing Program.* As a major segment of the *PA Enhanced Driving Guide*, it is being updated with additions to focus on our project goals of decreasing distracted driving and increasing restraint use. A section of the *Enhanced Driving Guide* involves the

"Ultimately, the intention is to involve the role of CTSP programs more into educational roles, increase interactions with driver education programs and parents ..."

"Stop-Think-Go Decision Making-Process". This segment was created to teach and reinforce efficient risk management decisions to novice drivers. It is tied in with the *Perceptual Driving Program* and used with *SWPBIS* methodology. The activities and scenarios that it contains look to the perception of, and response to risk, and risk management through filtering toward correct decision making. As part of a second-year goal, this program may be revised and made available to CTSP programs as stand-alone resource or combining with other activities aimed towards parents, novice drivers and younger teens. The *Decision-Making Process Module* may be used as an effort to integrate efforts with public school driver educators, or outside organizations.

CTSP input to the networking aspect of the project will play an important role in the success of this section the project. Information contributions to the newsletter will be welcome at any time, as postings to the social-media pages.

**R**emember to be on the lookout for the survey interview. They will be distributed within the next several weeks.

# **Roadway Safety Data and GIS Support**

With an increasing emphasis on identifying problem and safety focus areas through data analysis (Goodwin, 2015), Geographic Information Systems (GIS) are a valuable tool for state departments of transportation. GIS allows users to display, analyze and manipulate spatial data. In Pennsylvania, the state has created tools for internal users (CDART) and external users <u>PCIT (PA</u> <u>Crash Information Tool</u>) to allow data-driven decisions to be made with crash data. National examples include the Crash Outcome Data Evaluation System (CODES) methodology first developed by the <u>National Highway</u> <u>Traffic Safety Administration (NHTSA)</u> and now operated within each state and Data-Driven Approaches to Crime and Traffic Safety (DDACTS) also developed by NHTSA.

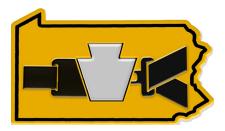
Some Highway Safety Offices partner with university transportation centers in their state. For example, in Maryland, the <u>University of Maryland's National Study</u> <u>Center for Trauma and Emergency Medical Services</u> (NSC) receives data from several State agencies and provides integrated data analysis using the CODES methodology (Scopatz and Goughnour, 2016). In North Carolina, the <u>University of North Carolina Highway</u> <u>Safety Research Center</u> publishes the Countermeasures That Work report that catalogues the latest national research by safety focus area.

Through this Statewide Program, the Indiana University of Pennsylvania Institute for Rural Health & Safety's Center for Transportation will partner with the Pennsylvania Department of Transportation's Highway Safety Office to provide data and GIS support to its network of partners working to create a culture of safe driving in Pennsylvania.

In addition, the approach builds off the conceptual framework of factors that influence driver behavior, developed by A.F. Williams and S.A. Ferguson in their paper using traffic safety research to support graduated licensing, which built off the Haddon Matrix, named for its developer William Haddon in 1970.

#### References

- Goodwin, A., Thomas, L., Kirley, B., Hall, W., O'Brien, N., & Hill, K. (2015). Countermeasures that work: A highway safety countermeasure guide for State highway safety offices, Eighth edition. (Report No. DOT HS 812 202). Washington, DC: National Highway Traffic Safety Administration.
- Scopatz, R.A., and Goughnour, E. (2016). Maryland's data linkage and analysis to support decision making: roadway safety data and analysis case study. (Report No. FHWA-SA-16-049). Washington, DC: Federal Highway Administration Office of Safety.
- Williams, A. F., & Ferguson, S. A. (2002). Rationale for graduated licensing and the risks it should address. *Injury Prevention: Reducing young drivers crash risk*, 8, ii9-ii16.



The IUP Department of Geography & Regional Planning (DGRP) geospatial curriculum has existed for over 30 years and emphasizes mastery of concepts and application of techniques. DGRP GIS Students will be juniors, seniors, or graduate students with a minimum coursework of Intro to GIS. Some reminders:

- Fall Communications Workshop, Oct. 9,10,11 2019 Shippensburg
- CTSP survey : Tentative release Sept. 30, 2019. Will be in electronic form, e-mailed to directors/coordinators.

Look for our next issue in November, 2019

If you have any events of interest with your program that can be shared in the next issue, submit them to <u>kwolford@iup.edu</u>

Kevin Wolford Project Coordinator CTSP Profiles / NDSP

Indiana University of Pennsylvania

Institute for Rural Health and Safety

2712 West Pike Road

Indiana, PA 15701

724-357-4877









10721 A9 ,ensibnl