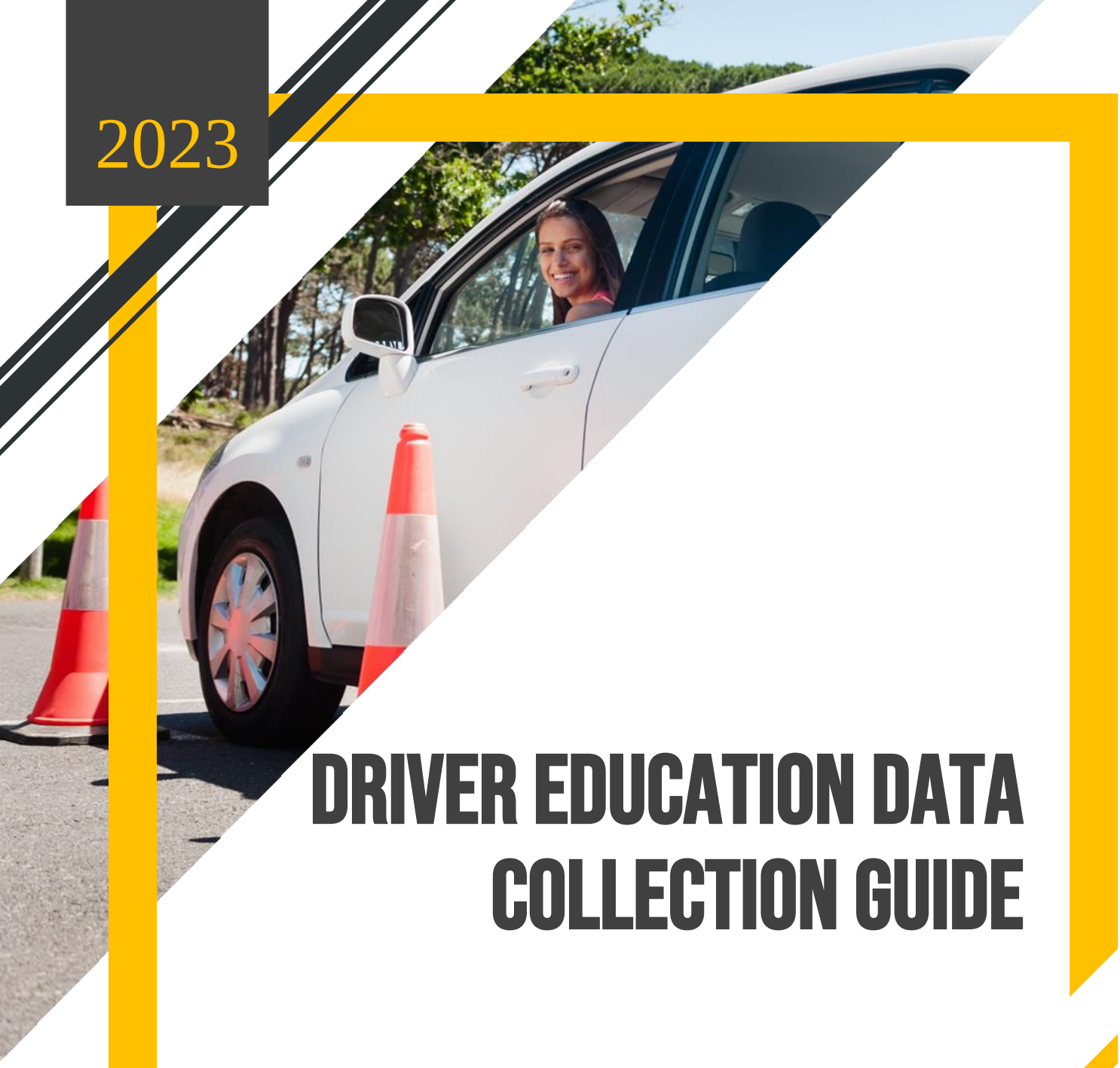
2023



DRIVER EDUCATION DATA COLLECTION GUIDE

ANSTSE

Purpose

This ***2023 Driver Education Data Collection Guide*** will assist State Driver Education Program Administrators in reviewing their current data collection efforts, identifying additional sources of relevant information, managing operations, assessing the status of driver education efforts, demonstrating accomplishments, and providing a foundation for possible research.

Introduction

State Driver Education Programs are designed to be prevention programs in that they seek to reduce violations, crashes, injuries, and fatalities. The primary focus in measuring the success of Driver Education is whether the program accomplished what it set out to. There are influences on the eventual outcome outside of the control of the Driver Education Program so measuring the success can be difficult. However, the goal is to produce safe and responsible teen drivers.

For many American teens, driver education is their initial introduction to the driving task and a prerequisite for obtaining a driver's license. Therefore, driver education should be a key component within each State's Strategic Highway Safety Plan and Highway Safety Plan with data available to both support the inclusion and identify goals to enhance the Driver Education Program. Data collection is key to measuring performance of the program, providing insight to foster program improvement, create goals, and heighten support.

The Strategic Highway Safety Plan encompasses all safety program areas while the Highway Safety Plan focuses more on behavioral programs, engineering projects, and commercial vehicle safety efforts. The inclusion of Driver Education within these plans is vital to ensure safe road users. To further guide States in the overall improvement of the State Driver Education Program, the Novice Teen Driver Education and Training Administrative Standards (NTDETAS) were developed which include standards for data collection.

The NTDETAS, initiated by the National Highway Traffic Safety Administration (NHTSA) and supported by the Association of National Stakeholders in Traffic Safety Education (ANSTSE), provides a guide for all novice Driver Education Programs in States striving to provide quality, consistent driver education. Data collection has been incorporated into Section 1, titled Program Administration, which contains standards related to the overall administration of Driver Education Programs. Section 1.3 Data Collection recommends:

1.3 Data Collection
1.3.1 States shall require the responsible agency/agencies for driver education and training to utilize traffic citation, crash, and other available State data by coordinating/participating with their State Highway Safety Office and Traffic Records Coordinating Committee to improve the driver education and training program.

1.3.2 States shall require the responsible agency/agencies for driver education and training to collect and utilize data specific to the driver education and training program (e.g., student, instructor, course information) to improve the driver education and training program.
1.3.3 States shall require the responsible agency/agencies for driver education and training to maintain student information (e.g., driver license number) that can be linked to the driver record.
1.3.4 States shall require driver education and training providers to collect and report student identification/information, performance, and other data to the responsible State agency/agencies.
1.3.5 States should develop and make available a standardized post-course evaluation to be completed by participants.

These standards for data collection were developed to highlight the importance of collecting accurate and relevant data which is imperative to the success of the State Driver Education Program. Driver Education State Administrators can utilize their own data and information from partner agencies to learn about the State's Driver Education Program, the impact of the program, identify areas for improvement, and set goals. Administrators can use data to answer questions and monitor changes within the program. This Driver Education Data Collection Guide will assist States and Driver Education providers in meeting the standards in Section 1.3 of the NTDETAS.

Opportunities are available to State Administrators through NHTSA, ANSTSE and other partners to assist in identifying strengths and opportunities specific to their program, including data collection.

Background

Driver education programs and methodologies date back to the 1930's. Since that time, much has changed in the world of traffic safety, specifically with roadway and vehicle design, as well as laws and policies. All these developments have informed the field of traffic safety education. While the value of novice teen driver education and training has long been a subject of debate among researchers,[1] educators, and others in the transportation and traffic safety community, it continues to be the primary introduction to the driving task for American teens. McKnight[2] (1985) writes, "…it is clearly something of a distortion to attribute accidents to driver education

1 Mayhew, D. R., & Simpson, H. M. (1996) *Effectiveness and role of driver education and training in a graduated licensing system.* Ottawa: Traffic Injury Research Foundation. Retrieved from: http://www.drivers.com/article/305/. See also: Mayhew, D. R., Simpson, H. M., Williams, A. F., & Ferguson, S. A. (1998). *Effectiveness and role of driver education and training in a graduated licensing system*. Journal of Public Health Policy 19, 51-67.

2 McKnight, A. J. (1985). Young driver accidents: In search of solutions, Proceedings of an International Symposium, D.R. Mayhew, H. M. Simpson, & A. C. Donelson (Eds.), 109-115. Ottawa: Traffic Injury Research Foundation of Canada. Cited in Mayhew & Simpson, 1996.

just because it leads to driving. Any group of people that drive will have accidents. By agreeing to license them, society accepts that risk. Driver education is simply a means of achieving a socially accepted goal." With the United States Department of Transportation's (U.S. DOT) adoption of the Safe System Approach in 2019, the value of driver education and training has been elevated.

The Safe System Approach considers five key elements that contribute to a safe transportation system – one of those key elements is safer people. Education and training have been incorporated as a pre-crash safety effort for safe road users that will reduce crashes, injuries, and fatalities. "Education and training on safe road behaviors comprise the cornerstones of promoting safe road users."[3] Driver Education and training creates a foundation of knowledge, skills, and behaviors to reduce risk while operating a vehicle which produces safe road users.

To ensure safe road users, State Driver Education Program Administrators are tasked with knowing the impact driver education is having in the State. State Administrators can identify the impact through data collection. Collecting relevant and accurate data is essential for answering questions, planning, identifying problems, and enhancing the program.

Importance of Data Collection

Accurate and up-to-date information (data) is the foundation for sound decision making related to program planning, enhancement, and assessment. Lacking the necessary information can lead to decisions that are based on anecdotes, opinions, or personal biases. Before trying to fix something, it is critical to accurately identify strengths and opportunities. Data alone cannot solve the problem. Instead, information enables a program manager to focus resources and efforts to answer questions, track changes over time, prepare for in-depth studies, and maximize the impact of the program.

To identify program strengths and opportunities, it is best to use established standards. The Centers for Disease Control and Prevention (CDC) has developed a framework for program evaluation that takes a public health view[4]. With traffic injuries and fatalities being a public health issue, this framework may be applied to reviewing Driver Education Programs. The framework involves engaging stakeholders to review all aspects of the program, identify partners and steps for improvement, and review of efforts to identify lessons learned.

There is no universal data model that will work for every State or program due to technological, structural, and political differences. Program managers need to assess the strengths and

[3] United States Department of Transportation (Winter, 2022). NHTSA's Safe System Approach: Educating and Protecting All Road Users. https://highways.dot.gov/public-roads/winter-2022/04.
[4] Centers for Disease Control and Prevention. Framework for program evaluation in public health. MMWR 1999;48(No.RR-11):1-42.

opportunities along with relevant data elements that accurately reflect the projects, programs, or efforts being conducted within a State relevant to driver education.

Collecting information on strengths and opportunities can seem like a daunting process but breaking the process into individual focused areas can be helpful. Considering the following questions prior to beginning any programmatic review can help assure a State is on common ground with all stakeholders. These questions are helpful for any program, but the responses will be unique due to available resources and program structure. There is no single answer, but it is valuable to consider:

- What information is needed? What do I need to know to excel in running the program?
- Why is this information important? Why do I want to know that information and how will it improve the program's performance?
- Is this information already being collected and by whom? Is there a partner that can help me gather or understand that desired information?
- How can this information be obtained?
    - Does a new data collection approach/portal need to be developed?
- Who will collect, organize, interpret, analyze, and communicate this information so it may be used? Once I get that information, who would be a good partner(s) to help me understand and best utilize it?
- How often is this information needed? Is that information something that would be helpful to review regularly? How often?

Collecting relevant data, data elements, and determining ways to analyze available data has been fair at-best for driver education, at the National, State/Territory, and local program level. Conducting a thorough exploration of relevant, available data will be invaluable in making changes to improve and potentially provide positive results over time.

Data Inventory Tool (Appendix A)

Creating a data inventory will further assist States in their data collection efforts. A data inventory is a full record of data assets that a State Driver Education Administrator has access to. An inventory could include the asset's name, update frequency, owner, etc. States have thousands of datasets across multiple databases. It is helpful to narrow down which data should be included in the inventory overall and knowing what information the Driver Education Program has access to can help determine if the correct data is being collected and what is still needed. This document provides a Data Inventory Tool within Appendix A to assist States in developing a driver education data inventory.

Partnerships

Although access to real-time and linked data across several programs would be ideal, it may not be possible or even necessary. Some States/Territories employ in-house trained analysts while

others contract with outside organizations such as a sister agency, university, or research organization. States can collect data internally; however, identifying outside agencies/organizations who collect and analyze data ensures efforts are not being duplicated. Developing and building relationships or partnerships with such agencies/organizations is imperative for gaining access to relevant and up-to-date information.

Data collection and analysis is time consuming, and State Driver Education Program Administrators are stretched thin across day-to-day responsibilities. Funding can also be a challenge. Therefore, strategic partnerships and collaboration with other agencies and organizations that already collect and analyze relevant data are very beneficial.

Many partner agencies and organizations have the technical expertise to safeguard the physical data environment and manage the system, as well as expertise in understanding the characteristics of each unique data file. State Driver Education Administrators are not expected to be data analysts or statisticians, but to build a mutually beneficial partnership. Analysts can create standard, periodic, and *ad hoc* reports, provide interpretation of findings, or provide other support as needed by a program manager. Collaboration has been proven to be very effective and efficient.

To identify those analytical colleagues, State Administrators should start at the State Highway Safety Office (SHSO) to identify available data sources, other than what is already collected within the Driver Education and Training Program. All States collect traffic records data and have a Traffic Records Coordinating Committee (TRCC). The TRCC is a group of data system owners, managers, and users that work together to improve data quality attributes of timeliness, accuracy, completeness, uniformity, integration, and accessibility[5]. Each TRCC is responsible for developing a Traffic Record Strategic Plan to guide and recommend improvements to the State's traffic records data collection efforts. The primary goal is to leverage existing processes and partner expertise. The TRCC can be your sounding board, provide consultation, analyze data, and may be able to identify Federal or State funding opportunities. By collaborating with the TRCC, State Driver Education Program Administrators can gain access to more information.

Information and Data Privacy

State and Federal laws such as the Driver's Privacy Protection Act or DPPA and others, specify what personal information and data may be collected by States' Departments of Motor Vehicles. Statues as such prohibit the disclosure of personal information and define who and how data can be accessed; what attributes can be shared, and how the information and data must be protected for driver licensing and educational purposes.

States and programs collecting or requesting access to such information and data must be fully aware of and follow the requirements of all data security laws. Violations and/or breaches are subject to civil and criminal penalties.

[5] National Highway Traffic Safety Administration. (2011, February). Model performance measures for State traffic records systems (Report No. DOT HS 811 441). Washington, DC: Author. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811441.

Scenarios

Example or sample scenarios are provided in this Guide. These scenarios were developed based on feedback among State Driver Education Administrators. What has been selected for inclusion represents fundamental core areas of concern to State Driver Education Administrators. Scenario questions were divided into two (2) areas: operations and program. Questions related to operations, specifically address the day-to-day operation of a State's driver education effort. The program section includes areas where it would be valuable to measure program impact.
The following scenario tables include:

- Fundamental Core Areas – Operations or Program.
- Questions:
    - Questions related to Operations reflect day-to-day operations of a State's driver education effort.
    - Questions related to Program are meant to reflect areas where it would be valuable to assess program impacts.
- Data – a reference to corresponding data options.
- Source/Owner – the possible source or owner of the data.
- Equation (or Guided Solution) – a possible way to solve or find an answer to the included question.
- Example – to illustrate how the equation can be solved.

The question-based scenarios can be copied and pasted into a separate document once a State Administrator identifies their most common/relevant data needs. It is important to note that the possible source/owner may vary between States, so this document should be used as guidance.

Scenario Table

Operations		
Students		
1. How many students take driver education? How many do not take driver education?		
Data	**Source/Owner**	**Equation**
Enrollment; population/census	Driver Education Program Office	Tally the total count of students in driver education, tally the number of teens of that age in the State
Example: 60,000 teens in the state minus 20,000 who take driver education = 20,000 take driver education and 40,000 do not take driver education.		
2. The average age of those who take driver education?		
Data	**Source/Owner**	**Equation**
Enrollment	Driver Education Program Office	Sum the ages of the students, divide the result by the total count of students
Example: 20,000 students take driver education. The total number of years, by adding up their ages, is 320,000. 320,000 divided by 20,000 is 16. The average age of teens who take driver education is 16.		
3. Is there a delay in teens taking driver education?		
Data	**Source/Owner**	**Equation**

Operations		
Enrollment	Driver Education Program Office	Sum the ages of the students, divide the result by the total count of students, compare the result to the age a teen is eligible for the driver education program under law
Example: The average age of 20,000 students taking driver education is 16 years old. State law allows teens to start driver education at 15 ½ years old. There is a 6-month delay in taking the driver education course from when State law allows teens to begin driver education.		
4. What is the race, gender, and other demographic data of driver education students?		
Data	**Source/Owner**	**Equation**
Demographics	Driver Education Program Office	Sum the information about the students for each demographic category, divide by the total count of students
Example: There are 5,000 Hispanic students out of the 20,000 students that take driver education. 5,000 divided by 20,000 is twenty-five percent. Twenty-five percent (25%) of the driver education students are Hispanic. There are 12,000 female students out of the 20,000 students that take driver education. 12,000 divided by 20,000 is sixty percent. Sixty percent (60%) of the driver education students are female.		
Courses		
1. What percentage of individuals are failing driver education due to attendance issues?		
Data	**Source/Owner**	**Equation**
Attendance; course pass/fail	Driver Education Program Office	Tally the number of students that did not complete driver education due to absences, divide by the total number of students enrolled
Example: There were 500 students that did not complete driver education due to absences out of the 20,000 students that were enrolled. 500 divided by 20,000 is 2.5 percent. 2.5 percent (2.5%) of the driver education students did not complete the course due to absences.		
2. How many attempts are made to pass the driver license knowledge test?		
Data	**Source/Owner**	**Equation**
Driver license pass/fail rate	State Driver Licensing Agency	Tally the number of students and how many attempts each student had; multiply the number of students for each attempt by the number of attempts; sum the value of each; divide the total value by the total number of students to get the average attempts

Example:

25,000 students total			
Number	**Attempts**		**Value** (Number multiplied by Attempts)
5,000	3		15,000
15,000	2		30,000

Operations			
5,000	1		5,000
		Total Value	**50,000**
		Students	**25,000**
		Average Attempts (Total Value divided by Students)	**2**

3. Pass/fail rate of the course knowledge test?

Data	Source/Owner	Equation
Course knowledge test pass/fail	Driver Education Program Office	Tally the number of students who did not pass the course knowledge test and divide by the total number of students who took the test

Example: There were 250 students that did not pass the driver education knowledge test out of the 20,000 students that were enrolled. 250 divided by 20,000 is 1.25 percent. 1.25 percent (1.25%) of the driver education students did not pass the course knowledge test.

4. Pass/fail rate of the course (may need to look at remedial as a separate question)?

Data	Source/Owner	Equation
Driver education course pass/fail	Driver Education Program Office	Tally the number of students who did not pass the course and divide by the total number of students enrolled in the course

Example: There were 400 students that did not pass the driver education course out of the 20,000 students that were enrolled. 400 divided by 20,000 is two percent. Two percent (2%) of the driver education students did not pass the course.

5. What percentage of parents/guardians participated in the course?

Data	Source/Owner	Equation
Parent/guardian involvement in the course	Driver Education Program Office, local program provider	Tally the number of parents/guardians attending a portion of the course (e.g., parent/guardian seminar) and divide by the total number of students enrolled in the course

Example: During the parent/guardian seminar, 18,500 parents were in attendance out of the 20,000 students in the program. 18,500 divided by 20,000 is 92.5 percent. Ninety-two and one-half percent (92.5%) of parents participated in the driver education course.

6. What accommodations are provided and how are the needs of the students addressed?

Data	Source/Owner	Equation
Accommodations provided	Driver Education Program Office, local program provider	List the accommodations offered, tally the number of times the student (or parent/guardian) used the accommodation

Example: Identify accommodations that are provided (e.g., hand brakes, interpreters, extended time for completion, etc.). Collect the count from each provider on how often those accommodations were used in the previous year.

7. What is the percentage of students in the State that may need accommodations?

Data	Source/Owner	Equation

Operations		
Students needing accommodations	Driver Education Program Office, local program provider	Tally the number of students in the State taking driver education who may need accommodations and divide by the total number of students taking driver education in the State
Example: There were 1,000 students who many need accommodations out of the 20,000 students that were enrolled. 1,000 divided by 20,000 is five percent. 5% of students may need accommodations in the driver education course.		
8. Which driver license knowledge test questions are missed most frequently?		
Data	**Source/Owner**	**Equation**
Driver License Test Item Analysis	State Driver License Agency	Standard data report on the question bank for driver license knowledge tests
Example: Tally the number of times an individual answers a question on the knowledge test correctly and incorrectly. Questions that are answered incorrectly more frequently should be examined to make sure they are not misleading in some way, or the answer is difficult to find in the driver manual. Questions that are answered correctly 100% of the time, should be examined for wording that is giving the answer away.		
9. What is the availability of Driver Education in the State?		
Data	**Source/Owner**	**Equation**
Availability of Driver Education Courses	Driver Education Program Office, local program provider	Tally the number of students taking driver education per county and divide by the population of eligible teens per county
Example: In Washington County there are 500 eligible teens for driver education. In Washington County 475 students took a driver education course. 475 divided by 500 is 95%. In Washington County ninety-five percent (95%) of the resident eligible teens took a driver education course.		
10. How many schools are testing students during the behind-the-wheel (BTW) portion of the course?		
Data	**Source/Owner**	**Equation**
Schools testing students during BTW	Driver Education Program Office, local program provider	Tally the number of course providers who are conducting a test during the BTW portion of the course and divide by the number of course providers in the State
Example: From a survey of the course providers, 14 of the 16 providers are conducting a test during the BTW portion of the course. 14 divided by 16 is 87.5%. Eighty-seven and one-half percent (87.5%) of the course providers are testing students during the BTW portion of the course.		
11. What is the number of quality assurance visits conducted the previous year?		
Data	**Source/Owner**	**Equation**
Quality assurance visits the previous year	Driver Education Program Office	Tally the number of providers in the State, tally the number of quality assurance visits per year and multiply the number of providers by the number of site visits that were conducted in the previous year

Operations		
Example: There are 16 providers for driver education in the State. Each provider received a quality assurance on-site visit every six months. Sixteen times two (once per six months) is 32. There were 32 quality assurance site visits this past year.		
12. Time interval between classroom and BTW.		
Data	**Source/Owner**	**Equation**
Date/time of classroom instruction and BTW	Driver Education Program Office, instructor prep provider	Subtract the date of classroom completion from the date of the start of BTW
Example: After surveying the course providers, the smallest time between the classroom and BTW portions of the course was 0 days as the two portions were run concurrently and the longest was a break of four weeks.		
Providers		
1. What is your distribution of providers throughout the State?		
Data	**Source/Owner**	**Equation**
Number of providers; location of courses	Driver Education Program Office	Identify any clusters of providers/courses and/or areas with none. Tally the number of counties in the State. Tally the number of counties with driver education course providers. Divide the number of counties with course providers by the total number of counties.
Example: There are 36 counties in the State. There is at least one driver education course provider in 25 counties. Twenty-five divided by 36 is 69.4%. Almost seventy percent (69.4%) of the State's counties have a driver education course provider in place.		
2. How many provider sanctions were issued?		
Data	**Source/Owner**	**Equation**
Provider sanctions issued	Driver Education Program Office	Count by type and severity, the number of sanctions issued in the previous year from all providers to get the sum.
Example: There were three providers that received some form of sanction last year. One provider received one sanction, the second provider received four sanctions, and the third provider received two sanctions. One plus four plus two equals seven (1+4+2=7). Seven sanctions were issued to driver education providers last year. Three driver education course providers received at least one sanction last year.		
3. How many provider applications were received?		
Data	**Source/Owner**	**Equation**
Applications to be a local provider received	Driver Education Program Office	Tally the number of applications received during the previous open enrollment/application period
Example: Twenty-five applications were received during the open enrollment/recertification period last year for driver education providers in the State.		
4. How many provider renewals were issued?		
Data	**Source/Owner**	**Equation**

Operations		
Provider renewals issued	Driver Education Program Office	Tally the number of renewals issued during the previous open enrollment/application period
Example: All of the current driver education course providers were approved to continue for another year. There are 16 driver education course providers, and all received approval.		
5. How many administrative hearings or appeals were held?		
Data	**Source/Owner**	**Equation**
Administrative hearings/appeals	Driver Education Program Office	Count the number of administrative hearings held and the number of appeals filed in the previous year
Example: There was one appeal that led to an administrative hearing last year.		
6. How many complaints were received about providers and what was the nature of the complaints?		
Data	**Source/Owner**	**Equation**
Complaints	Driver Education Program Office	Count by type and severity, the number of complaints received in the previous year
Example: Ten complaints were received on the driver education course providers. Seven of the complaints were related to the fees being too costly. One complaint was related to an instructor arriving late to a class. One complaint was related to the drive route used for the BTW portion of the course. One complaint was related to the student failing the licensing test after taking the driver education course.		
7. How many follow-ups to complaints were conducted?		
Data	**Source/Owner**	**Equation**
Complaint follow-ups	Driver Education Program Office	Count the number of complaints that received a follow-up in the previous year
Example: For the ten complaints received last year, only the concern about the drive route used for the behind-the-wheel (BTW) portion was included in that provider's quality assurance site visit last year.		
Instructors		
1. How many instructor sanctions were issued?		
Data	**Source/Owner**	**Equation**
Provider sanctions issued	Driver Education Program Office	Count by type and severity, the number of sanctions issued in the previous year
Example: One instructor was sanctioned due to the drive route used for the BTW portion of the driver education course.		
2. How many instructor applications were received?		
Data	**Source/Owner**	**Equation**
Applications to be a local provider received	Driver Education Program Office	Tally the number of applications received during the previous open enrollment/application period
Example: One hundred and fifty driver education course instructor applications were received and reviewed in the past year.		

Operations		
3. How many instructor renewals were issued?		
Data	**Source/Owner**	**Equation**
Provider renewals issued	Driver Education Program Office	Tally the number of renewals issued during the previous open enrollment/application period
Example: One hundred and forty-nine driver education course instructor applications were approved or renewed for the current year.		
4. Number of people that have failed the instructor training courses?		
Data	**Source/Owner**	**Equation**
Course pass/fail rates	Driver Education Program Office	Percentage of pass/fail by course, instructor, agency
Example: There were 30 new instructor candidates. One candidate dropped out of the course due to personal reasons and the remining 29 all received certificates for completing the instructor development course.		
Money		
1. Fees for driver education (Segment I and Segment II)?		
Data	**Source/Owner**	**Equation**
Fees charged and paid	Driver Education Finance Department; Legislation, local providers	Average fees by segment
Example: After a survey of the course providers, the fees charged to the parents/teen range from $375 to $495. There is no authority for the State to set a standard fee or a cap on the amount charged.		
2. Average pay for an instructor?		
Data	**Source/Owner**	**Equation**
Pay scale; payroll	Driver Education Finance Department, local providers	Average pay scale (hourly, by course, by student) by area/agency
Example: After surveying the course providers, instructor pay ranges from $15 to $25 an hour based on the assignment. Generally, the BTW segment hourly pay is slightly higher than the classroom segment.		

Program		
Impact		
1. Success rate of driver education?		
Data	**Source/Owner**	**Equation**
Course pass/fail; crashes, citations	Driver Education Program Office; Department of Transportation; Law Enforcement/Courts; Driver Licensing	If students have driver education on the driving record, tally the number of crashes/citations on the records for the prior year.

Program		
Example: In general, there have been recent studies that show the impacts of novice teen driver education and the graduated driver license (GDL) structure (see www.anstse.info). A study can be conducted on your own State's data that mimics the other studies that are on the website. This is a study that will likely need the help of an outside office that your TRCC can identify.		
2. Provide major crash causation factors within your State and adjust based on the data.		
Data	**Source/Owner**	**Equation**
Crash count, jurisdiction, contributing factors	Department of Transportation	Identify driver behaviors associated with high-frequency and high-severity crashes (e.g., distracted, impaired, speeding, unbelted)
Example: Using the annual crash data reports, information was obtained on the most common errors for drivers under the age of 18. Errors that are the most common are failing to follow traffic control devices, speed, lack of restraint use, distraction, and following too close. This data can be listed by individual age groups and by gender.		
3. Connection between students who take driver education and citation rates vs. those who don't take driver education.		
Data	**Source/Owner**	**Equation**
Course pass/fail; crashes, citations	Driver Education Program Office; Department of Transportation; Law Enforcement/Courts	If students have driver education on the driving record, tally the number of crashes/citations on the records for the prior year.
Example: In general, there have been recent studies that show the impacts of novice teen driver education and the graduated driver license structure (see www.anstse.info). A study can be conducted on your own State's driving record data for traffic convictions. This is a study that will likely need the help of an outside office that your TRCC can identify.		
4. What are the criteria for the performance measures?		
Data	**Source/Owner**	**Equation**
Enrollment; course pass/fail; crashes	Driver Education Program Office; Department of Transportation	Calculate percentage of pass v. fail; tally number on waiting list; tally number in a crash within a year/two years; tally number obtaining driver license within GDL
Example: Using information from questions listed earlier in this report, the driver education program can establish performance measures after tracking the data and percentages over a couple of years (or creating historical data and percentages).		
5. What is the time period from when a teen takes driver education, is issued a course completion certificate, and receives their license?		
Data	**Source/Owner**	**Equation**
Enrollment; course pass/fail; driver license	Driver Education Program Office; Driver Licensing Office	Subtract date of course pass/fail (certification) from date of license issuance
Example: There were 20,000 students enrolled in the driver education course. 500 students did not complete the course for a variety of reasons. By listing the 19,500 dates of the completion certificate dates and the date the student received their license, on a student-by-student list, the		

Program		
time period for each student can be calculated (date of licensure minus the date of the certificate equals the time window). Adding up all of those time window period amounts and then dividing by the number of students in that list, will give you the average time period between receiving the completion certificate and then obtaining the driver license. This is a study that will likely need the help of an outside office that your TRCC can identify.		
6. Requirement for other training to conduct with parents.		
Data	**Source/Owner**	**Equation**
Parental involvement survey; BTW logs	Driver Education Program Office (to be collected)	Tally and percent of parents attending orientation (if applicable); tally and percent of parents reporting BTW hours; tally and percent of parents reporting investment in course
Example: From the parent engagement session, 18,500 parents were in attendance. Parent supervised BTW log sheets were submitted by 16,000 parents. 16,000 divided by 18,500 is 86.5%. Over eighty-six percent of the parents submitted BTW hour tracking sheets for their teens that are enrolled in driver education courses.		
7. Will driver education reduce crashes?		
Data	**Source/Owner**	**Equation**
Course pass/fail; crashes, citations	Driver Education Program Office; Department of Transportation; Law Enforcement/Courts; National and International studies	If students have driver education on the driving record, tally the number of crashes/citations on the records for the prior year.
Example: In general, there have been recent studies that show the impacts of novice teen driver education and the graduated driver license structure (see www.anstse.info). A study can be conducted on your own State's driving record data for traffic crashes. This is a study that will likely need the help of an outside office that your TRCC can identify.		

Appendix A

Data Inventory Tool

This Data Inventory Tool is designed to assist States in developing a data inventory for the State Driver Education Program. Utilizing this document, State Driver Education Program Administrators will gain insight into the Program by understanding what data may be available and why the information could be important to the Program. A Data Collection Matrix and Data Rationale Table are included below. States should also be aware of legislative data requirements including record retention requirements.

Data Collection Matrix

The Data Collection Matrix was developed as a check list to identify what data the program currently has available and what is needed within a short-term, mid-term, and long-term range. Below is a key for utilizing the matrix.

Data Collection Matrix Key:

Data Category/Set	Have (Data you already have access to)	Need (Data you need)		
		ST (Short-Term)	MT (Mid-Term)	LT (Long-Term)
Dataset/Element				
Data Field				

There are three levels of Data included in the Data Collection Matrix. The **Data Category/Set** is a main category of data followed by a subcategory **Dataset/Element.** Many **Datasets/Elements** break down even further into specific **Data Fields**. For each Data Field, you can check if you already have access to this data or if you need it. If you need a specific piece of data, utilize the boxes labeled **ST** (Short Term), **MT** (Mid-Term), or **LT** (Long Term) to determine your goal to have the information available.

Data Rationale Table

A State Driver Education Program Administrator may not be aware of all the data that is available to them or understand why it would be important to have. State Administrators should utilize the Data Rationale Table in conjunction with the Data Collection Matrix to gain insight as to why certain data should be collected.

The Data Rational Table consists of two columns. The first column titled ***"Data Field and Rationale"*** contains specific data pieces along with the rationale which explains why the data is important or useful. The second column, ***"Guidance,"*** gives further information to assist driver education programs in utilizing the data.

Information and Data Privacy

State and Federal laws such as the Driver's Privacy Protection Act or DPPA and others, specify what personal information and data may be collected by State Department of Motor Vehicles. Statues as such prohibit the disclosure of personal information and define who and how data can be accessed; what attributes can be shared, and how the information and data must be protected for driver licensing and educational purposes.

States and programs collecting or requesting access to such information and data must be fully aware of and follow the requirements of all data security laws. Violations and/or breaches are subject to civil and criminal penalties.

Data Collection Matrix

Data Sets and Elements	Status			
Driver Education Program Data	**Have**	**Need**		
		ST	**MT**	**LT**
Course Information				
Availability of Training Opportunities				
Course Code & Unique Identifiers				
Dates of All Courses				
Course Completion Date(s)				
Curriculum Used				
Number of Students				
Course Hours				
Completion Certificate Number				
Theory: Classroom/Online Course				
Attendance				
Delivery Methods				
Knowledge Test Scores				
Number of Make-Up Tests				
Classroom Pass/Fail Rates				
Parent/Guardian Participation				
Accommodations provided				
Behind-the-Wheel (BTW)				
BTW Test Scores				
BTW Pass/Fail Rates				
Vehicle Inspection/ Maintenance Records				
Provider Information				
Type of Provider				
Location(s)				
Complaints				
Violations				
Sanctions				
Corrective Actions				
Student Information				
Name				
Date of Birth (DOB)				
Address				
Sex and Gender Identity				
Driver License Status				
Permit/License Number				
Course(s) Enrolled In				
Course Location(s)				
Dates of Course(s) Taken				
Reasons for Enrolling				
Instructor(s) Information				
Name				
Up-to-Date Background Check				
Instructor License Status				
Professional Development Hours				
Instructor License Renewal Information				
Number of Classroom Courses Conducted				
Behind-the-Wheel Hours Conducted				
Complaints				
Violations				
Sanctions				
Corrective Actions				
Teen Licensing Data	**Have**	**Need**		
		ST	**MT**	**LT**
Driver Control Record Data				
Driver Demographic Profile Data				
Age				
Address				
Sex and Gender Identity				
Race				
Education Level				
Driver License (DL) Testing Data				
DL Testing Provider(s)				
DL Knowledge Test Score(s)				
DL Knowledge Test(s) Pass/Fail Rates				
DL Skills / Road Test Score(s)				
DL Skills / Road Pass/Fail Rates				
DL Testing Waiver				
Specialized DL Testing				
Number of DL Testing Attempts				
DL Testing Location(s)				
DL Examiner ID				

Data Sets and Elements	Status			
Permit Issuance Data				
Date Issued				
Renewals				
Licensure Issuance Data				
Verification of Supervised Practice				
Type				
Date Issued				
Revocation Information				
Suspension Information				
Withdrawals				
Enforcement Data	**Have**	**Need**		
		ST	**MT**	**LT**
Traffic Violations				
Traffic Citations				
Traffic Crashes				
Chemical Testing				
Reconstruction Reports				
Adjudication Data	**Have**	**Need**		
		ST	**MT**	**LT**
Traffic Convictions				
Driver Sanctions				
Post-Adjudication Data	**Have**	**Need**		
		ST	**MT**	**LT**
Remediation Referrals and Compliance				
Problem Solving Courts (Young Driver, DUI, etc.)				
State Crash and Injury Data	**Have**	**Need**		
		ST	**MT**	**LT**
Crash Type				
Location				
Vehicle Types Involved				
Most Frequent Crash Locations				
Injury				
Fatality				

Data Sets and Elements	Status			
Other Data	**Have**	**Need**		
		ST	**MT**	**LT**
Medical Data				
Medical Examiner Data				
Trauma Registry				
Hospitalization Data				
Emergency Medical Services Data				
Insurance Claim Data				
Crash Claim Data				
Roadway Data				
Inventory				
Roadway Classification				
Roadway Location				
Traffic Controls				
Vehicle Miles Traveled				
Census Data				
Population Data				
Sociodemographic Information				
Vital Statistics				
Driving Behaviors/Habits				
Exposure Data				
Driving Time				
Driving Distance				
Traffic Circumstances				
Weather				
Perception and Attitudes				
Injury Surveillance				
Behavior Surveillance				
Naturalistic Driving Data				
Geospatial Data				

Data Rationale Table

Driver Education Program Data

Data Field and Rationale	Guidance
Course Information	
Availability of Training Opportunities (i.e., Classroom, Behind-The-Wheel (BTW), or other) Collecting dates, times, and locations of training opportunities assists in determining if the demand for driver education and training is being met.	Require all providers in the State to submit information on all available training opportunities. Location will identify gaps in service areas across the State. Frequency will identify how often courses are being held. All course information should be listed in a common location (landing page) for available course information.
Course Code & Unique Identifiers (training center, course number, etc.) Course code and/or unique identifiers will identify the most popular courses, if an enrollee attends more than one course, and for tracking purposes, if there are compliments or complaints about a certain course.	Course name or description must be specific, consistent, and standardized across the State (e.g., course/provider ID number).
Dates of All Courses Start and end dates can evaluate if the time was sufficient for training. This information can also help to identify the time gap between completing the classroom portion and starting the behind-the-wheel instruction. Further, providing students and parents/guardians with accurate course dates increases productivity, service, and success.	Collecting dates includes start and end date. Require all providers in the State to submit information on all available courses. All course information should be listed in a common location (landing page) for available course information.
Course Completion Date(s) Completion dates are important to further evaluate any outcome information (crash/citation) that occurs before, during, and after the course. The dates can be used to determine the time window between the end of the course and the application/receipt of the driver license.	States should collect this information through completion certificates or a data collection system used by each school, school program, or driver licensing data system. Having an electronic system that allows providers to input this information would be the most reliable.

Data Field and Rationale	Guidance
Curriculum Used The curriculum used can be matched against the State standards for compliance. Curriculum standards or a list of approved curricula will lessen variance in learning outcomes throughout the State and help provide consistent, equitable, quality instruction to all students who participate in the driver education program. This information can also be used for a "checks and balances" construct. All instructors should be required to follow a quality curriculum to produce the needed learning outcomes.	States should have curriculum standards and/or a list of approved curricula with a verification process that ensures each provider is utilizing an appropriate/approved curriculum. When updates are needed for law changes, new crash/citation data, or emphasis areas identified that are tied to the local communities where the courses are being offer, it is easy to distribute necessary information when there is a State standard for curriculum content.
Number of Students The number of students enrolled in a driver education course can be used to determine how many teens take and/or do not take driver education when compared to the number of teens eligible to obtain a driver license. It can be used to evaluate the accessibility of courses and/or whether more marketing is needed to draw students in. The number of students can be checked against the State standard for minimum and maximum course counts.	States should collect driver education course enrollment data from all providers. This data can be compared with U.S. Census information or school enrollment records.
Course Hours Collecting course hours will assist with evaluating if the length of time was sufficient for training. If States require a specific number of hours of instruction for driver education courses, collecting this information verifies providers and instructors are in compliance.	States should indicate, in administrative rule, policy, or guidance, a minimum number of required hours for: • classroom style: traditional face-to-face and online courses • observation, if applicable • behind-the-wheel Data must be viewed using direct comparison (i.e., same hours of training).
Completion Certificate Number The completion certificate number helps track certificates issued and submitted for a driver license and helps reduce the potential for duplication and fraud. A unique number and/or certificate might be needed for the parent/guardian's personal auto insurance discounts.	These certificates may be used to obtain a driver's license. The certificates should be tracked and documented in the driver license record file.

Data Field and Rationale	Guidance
Theory: Classroom Style/Online Course	
Attendance Course attendance data assists with budget line items such as number of instructors, curriculum materials, vehicles, and classroom space needed. This information may also be used to evaluate driver behavior and can assist with quality checks of providers or instructors if students are consistently dropping out of a specific course. If a student claims to have attended a course but did not receive a completion certificate, attendance records can be used to verify.	Individual student attendance records should be kept for the entirety of the driver education course (i.e., classroom, BTW, range, etc.) or as specified by the State.
Delivery Methods The delivery methods instructors are using will assist with evaluating the effectiveness of different types of delivery methods (e.g., virtual training). If a provider or the State is seeing poor success with a specific delivery method, it will indicate a need for improvement.	Every student will have different learning strengths and weaknesses based on the method of delivery for both the classroom style portion and BTW. Collection of student data should include the type of delivery method the students experienced.
Knowledge Test Scores Course knowledge test scores establish pass/fail rates and provide indicators if the knowledge test should be revised. This may also help in predicting student driving experience and behavior. Further, this information can be helpful to evaluate exam reliability and validity as well as student retention and learning outcomes.	Raw test scores (numeric) are easier to match and track. There should also be an indicator that identifies if the course knowledge test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the total number of failures is available. Any questions students are consistently missing should be tracked. Be sure the test is updated annually to reflect new codes and rules. An item analysis of each question should be maintained to assist in identifying the questions that are most frequently missed or answered correctly.

Data Field and Rationale	Guidance
Number of Make-Up Tests Repeat testing could prove to be a valuable indicator regarding the course's difficulty and the type of individuals enrolling in the course.	All records for make-up tests include number of test attempts, questions missed, scores, and completion status.
Classroom Pass/Fail Rates Classroom Pass/Fail Rates can help evaluate instructor, provider, and/or program success. If there is an extreme percentage of passes or fails, the course may be too easy or too difficult. May indicate a need for instructor re-training or other improvements to the driver education program and curricula. States could use this information as grounds for an audit of a provider or instructor. This data can assist to identify skill and learner development issues and possibly enrollee experience and behavior. Additionally, the this information can be used to further evaluate any outcome information (crash/citation) that occurs before, during, and after the course.	Pass/Fail rates also include incompletes, dropouts, etc. It is important to identify what constitutes course completion. Providers should be required to have a clear rubric for scores and indicate the number of hours for incomplete vs. dropouts. Post course surveys will give more information regarding reasons for incompletions and dropouts. Check pass/fail rates against learner success criteria as well as student participation and student pass/fail rates.
Parent/Guardian Participation Parent/Guardian involvement has proven to be a major factor in student success, and collecting this data can help evaluate the effectiveness of parent/guardian involvement. If programs with parent/guardian involvement are more successful, this would indicate a need to develop and advocate for initiatives involving parents/guardians in other programs. This information can also be used to evaluate driver behavior and skill performance throughout the course.	In administrative rule, policy or guidance, States should outline the expected parent/guardian involvement and the specific support, knowledge, or level of participation required. Parent/guardian involvement can be tracked through enrollment or participation (if attending an in-person or web-based education platform) in parent/guardian seminars, instructor facilitated drive-alongs during BTW, supervised driving logs, and post-course surveys. Further, having resources on a website for parents/guardians to access will indicate its use by how many people visit the site and for how long.

Data Field and Rationale	Guidance
Accommodations Provided The purpose of an accommodation is to provide a student with equal access to learning and testing. Collecting this data will allow a State to verify that all students are getting what they need and give insight into the accommodations that different disabilities require. If students are not receiving appropriate accommodations, the data can help determine where improvements need to be made within the program: • Provider and/or instructor • Teacher Training • Access to specialized courses for drivers with disabilities This information can also be used to evaluate driver behavior and skill performance throughout the course as well as any outcome information (crash/citation) that occurs before, during, and after the course.	Student records and student driving logs need to have an indicator and place for accommodation notes. Include documentation of previously recorded accommodations and performance in the student's records. Track student performance through participation, quizzes, exams, behavior, and competency-based grading.
Behind-the-Wheel (BTW)	
BTW Test Scores BTW Test Scores will help establish pass/fail rates and provide indicators if elements of the BTW test should be revised. This information can help identify skill development issues and possibly enrollee driving experience and behavior.	States should develop and require providers to utilize a standardized driving log and scoring rubric for student BTW skill assessments. It is best if all the instructors at a school use the same driving log. Raw test scores (numeric) are easier to match and track. There should also be an indicator identifying if the BTW test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the number of failures is available. Any skills students are consistently missing should be tracked. Be sure the test is updated annually to reflect new codes and rules.

Data Field and Rationale	Guidance
BTW Pass/Fail Rates BTW Pass/Fail Rates can help evaluate instructor, provider, test exercise, and program success. If there is an extreme percentage of passes or fails, the course may be too easy or too difficult. May indicate a need for instructor re-training or other improvements to the driver education program or curriculum. States could use this information as grounds for an audit of a provider or instructor. Collecting BTW Pass/Fail Rates could indicate a need to evaluate if there are unknown issue such as gender, race, or age impacts to success of the BTW portion of the course. This information can also help identify skill/learner development issues, enrollee experience/behavior, and be used to further evaluate any outcome information (crashes/citations) that occur before, during, and after the course.	States should develop and require providers to utilize a standardized driving log and scoring rubric for student skill assessments. It is best if all the instructors at a school use the same driving log. Pass/Fail rates also include incompletes, dropouts, etc. It is important to identify what consists of completion. Providers should be required to have a clear rubric for scores and indicate the number of hours for incomplete vs. dropouts. Post course surveys will give more information regarding reasons for incompletions and dropouts.
Vehicle Inspection/Maintenance Records States can ensure providers are training students in mechanically sound vehicles and are maintaining vehicle registration and inspections (if required).	States should require all providers to keep vehicle maintenance records. Safeguards the driver education vehicles by verifying that vehicles are serviced and repairs are performed regularly and on time. Vehicles should be properly marked as driver education vehicles. Vehicle upkeep and inspections should be required. Track driver education vehicles through VIN numbers and license plate numbers. Maintain and collect mileage of the vehicles. Require providers to maintain inspection records and services records indicating a replacement or repair needed on the inspection form.

Provider Information

Data Field and Rationale	Guidance
Type of Provider (Public, Private, Parent-Taught) Driver education is predominantly delivered by public and private providers. The option for a parent-taught program may also be allowed I some States. This means that the driver education program can have multiple agencies responsible for different providers, possibly creating gaps or differences. Viewing data on the type of provider can indicate if improvements are needed and where they are needed. Collecting the type of provider (public, private, parent-taught) will also allow a State to evaluate if the type of provider affects leaning outcome, course completion and/or pass/fail rates. The types of provider data can be used to further evaluate any outcome information (crashes/citations) that occur after the course.	Whether a student takes a course with a public, private, or parent-taught provider, ensure they are being evaluated and tested the same. While acknowledging that students have different performance capabilities, they should still have similar learning outcomes. This information can be compared with pass/fail rates to see if rates are consistent in public, private, and parent-taught driver education. If it is not, the program could need improvements to build consistency across the board. It may be difficult to collect data on parent-taught driver education. Post licensing data through citations, convictions, and crash data would be the best way to evaluate this type of delivery method.
Location(s) A list of provider locations gives States basic information of providers for inspections, audits, mailing information, providing correct information to the public, etc. Determining locations also assists in determining access and gaps in service.	Collect provider physical locations and make the information available to the public on a website. Check with the governing agency for rules and policies regulating classroom size, facilities, number of locations allowed, and safety regulations. Maintain records with physical addresses and primary point of contact information. Collect data on number of courses available at each location, dates/times, number of instructors, and student enrollment.
Complaints Recording and maintaining individual complaints gives Driver Education Program Administrators an insight into what is happening with specific providers and if any action needs to take place. This information will provide a formal trail if a sanction or revocation is necessary and could indicate a need for improvement within the program.	States should require all providers to have a process in place for complaints. The complaint process should be published and available to the State for audit purposes. The State should also have a process for directly accepting complaints. If possible, require all State-level complaints to be submitted in writing. There should be a single location available for submitting complaints. Anonymous complaints do not hold up but may be useful. Developing a complaint form is helpful. Keep all records, communications, and notes for as long as the State agency requires for record retention.

Data Field and Rationale	Guidance
Violations Recording and maintaining violations allows Driver Education Program Administrators to report on a provider violation(s). These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can assist in identifying providers that may need training/guidance in certain areas for overall program improvement.	States must have clearly defined administrative rule, policy, or guidance for violations. Violations cannot be imposed if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.
Sanctions Recording and maintaining sanctions allows Driver Education Program Administrators to report on provider sanction(s). These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can assist in identifying providers that may need training/guidance in certain areas for overall program improvement.	States must have clearly defined administrative rule, policy, or guidance for sanctions. Sanctions cannot be imposed if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.
Corrective Actions Recording and maintaining corrective actions allows Driver Education Program Administrators to report on provider corrective actions. These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can assist in identifying providers that may need training/guidance in certain areas for overall program improvement.	States must have clearly defined administrative rule, policy, or guidance for corrective actions. Correction actions cannot be recommended if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.

Student Information

Data Field and Rationale	Guidance
Name Recording the formal student's name can be used to prevent fraud and is valuable in identifying variables for linkage. The learner's permit name is the "official name" recognized by the State and more specifically by the State's driver licensing agency. It is the name that will appear on citations, crash reports, court actions, and vehicle registration documents. It may also be the name used by insurance companies.	Most course registration systems collect the student's name. The name that appears on the student's learner permit is the preferred name. Nicknames or abbreviated names can interfere with data extractions. Be sure to capture name in same format as the driver record file (e.g., full name in one field vs. first name; middle name; last name as separate fields).
Date of Birth (DOB) Date of birth will allow for the tracking of the student's age beyond the completion of a course. Recording the student's date of birth can be used to prevent fraud. DOB is valuable in identifying variables for linkage. Most helpful to collect here, but if it's a problem then potentially acquire this through linkage to the driver license file.	Not all course registration systems collect the student's date of birth. The date of birth should be documented, and a specific way to record the DOB should be created. Generally, following the process used by the State driver licensing agency is the best approach. DOB will also help with linking the course record to the learner's permit or driver license record if other information is incorrect.
Address An address helps identify a specific person and usually appears on vehicle registration documents, crash reports, learner's permit and driver license files, citations, and court documents. An address can be used for surveys and to plot residence against crash and citation location.	Most course registration systems collect an address. This address should be the one that appears on the learner's permit. Sometimes individuals may provide incorrect addresses. Potentially, acquire the address through linkage to the driver license file to prevent incorrect addresses.
Sex and Gender Identity Data collected on both sex and gender identity help identify the training customer and can help identify trends in who enrolls, pass/fail rates, driving behaviors (safe and unsafe), risk management, and comparison to census data for course saturation across the State. Identifying trends utilizing sex and gender identity can help with program improvement.	Sex is a biological characteristic while gender identity is a social and cultural construct. It is important to collect data on both taking into consideration biological factors and social factors related to a person's driving skills, driving behaviors, attitude toward driving, etc. Follow approach/format used in State driver record file. Potentially acquire this through linkage to the driver record file, if necessary. This can be gathered with a check box. Allows the data to be sorted for comparing and evaluating driving behaviors by sex and gender identity codes.

Data Field and Rationale	Guidance
Driver License Status Driver license status may help identify why an individual enrolls in a course. Validating the status of the license/permit before the BTW phase of the course keeps the provider in compliance with licensing laws and driver education policies.	This information can usually be gathered with a simple check-off list. Does the enrollee have a learner's permit, intermediate license, or full license? And, is the license valid (suspensions or revocations)?
Permit/License Number The learner permit or driver license number is very helpful when linking to other data sets (i.e., crash, citation, etc.) for outcome research.	Most courses collect this information, and it can usually be gathered with a simple check-off list. This identifier is the most accurate way to link the person back to their license and/or vehicle registration file. It is critical to accurately collect this information.
Course(s) Enrolled In Knowing the course or courses an individual enrolls in will help determine the most popular course and the experience the individual is seeking.	The course descriptions need to be accurate and consistent. May just be a course ID number, but something consistent and standardized.
Course Location(s) An address can be used to plot against residence and proximity to other resources (e.g., are students made to travel long distances to reach the training site?).	The course location helps when analyzing geographic coverage of the driver education program delivery across the State. This may also be used if there are subsidies involved for student tuition, instructor development, or waivers for certain program elements.
Dates of Course(s) Taken These dates are important to further evaluate any outcome information (crashes/citations) that occur before, during, and after the course.	It is recommended to collect both pass and failure dates. Thus, tracking how many times a student took the course.
Reason(s) for Enrolling This helps identify why individuals enroll in driver education. This information is helpful for planning and justifying a driver education effort, can shape the outreach efforts for driver education, and parent resource material.	This can be collected through a drop-down check-off list or with a space for comments.

Instructor Information

Data Field and Rationale	Guidance
Name This helps if evaluation of the instructor is warranted. It also helps with program assessment in terms of resource availability, instructor performance, and potential restructuring.	Collect instructor full legal name, driver license number, and instructor trainer or education license identification number. For all courses, the instructor(s) who taught should be recorded. Also include whether the instructor(s) taught in-class, behind-the-wheel, or online.
Up-to-Date Background Check Instructors will be in the presence of children and the laws generally require a background check. These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. These records can help at the State or provider level. If at the provider level, a routine audit should verify that this information is being kept as required.	It is highly recommended to continuously monitor the instructor for Business Integrity Violations (BIC) and National Crime Information Systems (NCIC) violation, as well as driver license status and violations. Continually monitoring both criminal records and driving records is highly recommended. The State Driver Licensing agency has an automated system to monitor driving records.
Instructor License Status This information will help to continuously track the instructor from when they start, end, change schools, or retire and regain employment. Administrators could get questions from providers about instructor's license status to verify they are employable. Using the instructor's status will verify the instructor is qualified to instruct that portion of the course. Collecting this information prevents instructors who do not have a license in good standing to be hired. This information can also be used to identify program improvements within instructor training, instructor qualifications, and/or license renewal requirements.	States should establish instructor qualification and requalification requirements which includes maintaining a good driving record. Create an administrative rule and policy to define a good driving record and what is required to maintain an active instructor license. Continually monitoring driving records is highly recommended. The State Driver Licensing agency have an automated system to monitor driving records. Depending on the governing agency for the business/company and public-school programs they have a system in place to perform background checks and to continually monitor them for oversight of the program.

Data Field and Rationale	Guidance
Professional Development Hours Instructors often need to take continuing education courses to satisfy license renewal requirements. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	The State should have written policy on professional development which should be a part of the license renewal requirements. The provider and instructor should be required to keep a record by name and number regarding training dates, instructor licensing activation, and professional development. To renew or maintain the instructor license, professional development should be required. Have a method or procedure in place for those who miss professional development training requirements and how to renew or maintain an active license to teach.
Instructor License Renewal Information Ensures instructor license is current or gives information on what the instructors needs to do to satisfy license renewal requirements. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	States should establish license renewal requirements. The provider and instructor should keep a record by name and number regarding training dates, instructor licensing activation, and professional development. Educate instructors to maintain their own instructor training data, as well as the company or school they work for.
Number of Classroom Courses Conducted If a State requires instructors to teach a minimum number of courses per year as part of the licensing requirement, this information will help verify instructor compliance and license qualifications. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	Providers should maintain records of who teaches the courses, the start and end dates, as well as the student performance outcomes. Data from instructors can be quantified by student success and failure outcomes.
Behind-the-Wheel Hours Conducted If a State requires instructors to teach a minimum number of courses per year as part of the licensing requirement, this information will help verify instructor compliance and license qualifications. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	Providers should maintain records of who teaches BTW, the start and end dates, times, mileage, as well as the student performance outcomes. Student driving logs should have instructor information as well as acknowledgement of practice and skill outcomes. Data from instructors can be quantified by student success and failure outcomes.

Data Field and Rationale	Guidance
Complaints Recording and maintaining individual complaints gives Driver Education Program Administrators an insight into what is happening with specific providers or instructors, and if any action needs to take place. The severity of the complaint will impact the consequence if the allegation is proven to be accurate. This information will provide a formal trail if a sanction or revocation is necessary. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	States should require all providers to have a process in place for complaints. The complaint process should be published and available to the State for audit purposes. The State should also have a process for directly accepting complaints. If possible, require all State-level complaints to be submitted in writing. There should be a single location available for submitting complaints. Anonymous complaints do not hold up but may be useful. Developing a complaint form is helpful. Keep all records, communications, and notes for as long as State agency requires for record retention.
Violations Recording and maintaining violations allows Driver Education Program Administrators to report on instructor violation(s). These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	States must have clearly defined administrative rule, policy, or guidance for violations. Violations cannot be imposed if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.
Sanctions Recording and maintaining sanctions allows Driver Education Program Administrators to report on instructor sanction(s). These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	States must have clearly defined administrative rule, policy, or guidance for sanctions. Sanctions cannot be imposed if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.

Data Field and Rationale	Guidance
Corrective Actions Recording and maintaining corrective actions allows Driver Education Program Administrators to report on instructor corrective actions. These records provide evidence to show how the State is fulfilling their legal obligations on oversight of the driver education program. This information can also be used to identify program improvements within instructor training and/or license renewal requirements.	States must have clearly defined administrative rule, policy, or guidance for corrective actions. Correction actions cannot be recommended if rules are not in writing. Proper documentation, evidence, and verification of prior training must be identified and collected. Keep all records, communications, and notes for as long as the State agency requires for record retention.

Teen Licensing Data

Data Field and Rationale	Guidance
Driver Control Record Data The driver control record (DCR) contains core information on individual drivers. If the DCR contains a notation regarding driver education, it may provide the ability to conduct longitudinal studies to follow graduates of driver education. In some cases, the driver education file will need to be matched with the DCR if there is not a notation for driver education. This information will assist in comparing teens who have taken driver education against those who have not. Evaluates driving behaviors between the two sets to show if driver education is effective.	Reports on a person's driving record may be released by the State Driver License agency to the requester who qualifies under the permissible uses of the Driver Privacy Protection Act (DPPA). A motor vehicle record/report (MVR) should display convictions, arrests, suspensions, and revocations but does not constitute the entire DCR. State Administrators may gain access to raw driver record data or driver records for students within the driver education program, if allowed by law. Partnerships between the driver education program and the State driver licensing agency can be valuable for accessing and utilizing data for program evaluations.
Driver Demographic Profile Data	
Age The date of birth and age are very valuable to link with other data sources or sorting the driver record data.	Age can be sorted to identify age groups with most crashes, injuries, fatalities, citations, convictions, etc.
Address An address can be used for surveys and to plot residence against crash, conviction, and citation location.	The address will be on registration documents, crash reports, learner's permit and driver license files, citations, and court documents.
Sex and Gender Identity Data collected on both sex and gender identity help identify the driver and can help identify trends in driving behaviors (safe and unsafe), risk management, etc. Identifying trends utilizing sex and gender identity can help with program improvement.	Sex is a biological characteristic while gender is a social and cultural construct. It is important to collect data on both taking into consideration biological factors and social factors related to a person's driving skills, driving behaviors, attitude toward driving, etc. Follow approach/format used in State driver record file. Potentially acquire this through linkage to the driver record file, if necessary. This can be gathered with a check box. Allows the data to be sorted for comparing and evaluating driving behaviors by sex and gender identity codes.

Data Field and Rationale	Guidance
Race Collecting data on race can assist in comparing and evaluating driving behaviors by races.	If the driver record contains data on race, this can be used when combining data files together as other data files may not include this data.
Education Level Education level could identify trends and help with program improvement.	Allows for the comparison of crash, conviction, citation data, etc. by education levels.
Driver License (DL) Testing Data	
DL Testing Provider(s) This will help establish pass and failure rates and provide indicators if the knowledge test and/or elements of the road/skills test should be revised. Information will also assist with establishing trends within examiners and delivery methods by location.	Should collect this information for both knowledge test providers and road/skills test providers. Testing providers could be the driver licensing agency, Third-party Examiners, or approved driver education programs. Information collected for testing. • facility location • examiner • type of exam • delivery of exam • date/time • number of attempts • score • questions missed • modifications/adaptations The examiner needs to maintain these records and all data should be sent to one location, usually the driver licensing agency.
DL Knowledge Test Score(s) This will help establish pass/fail rates and provide indicators if elements in the knowledge test should be revised. Having this information can be helpful to evaluate exam reliability and validity.	States should develop a standardized knowledge test question pool. Raw test scores (numeric) are easier to match and track. There should also be an indicator that the knowledge test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the number of failures is available. Any questions applicants are consistently missing should be tracked. Be sure the test is updated annually with new code and rules.

Data Field and Rationale	Guidance
DL Knowledge Test(s) Pass/Fail Rates This information can also be used to further evaluate any outcome information (crashes/citations) that occur after the driver license is obtained. If this portion of the driver license exam is conducted by driver education providers, States could use this information as grounds for an audit of a provider or instructor.	States should develop a standardized knowledge test question pool. There should also be an indicator that the knowledge test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the number of failures is available. Any questions applicants are consistently missing should be tracked. Be sure the test is updated annually with new code and rules.
DL Skills/Road Test Score(s) This will help establish pass rates and provide indicators if the skills/road test should be revised. This information can be used to evaluate crash, citations, convictions after obtaining the driver license.	States should ensure that a State standardized exam is being utilized and all testers have been trained on how to collect data and evaluate skills. Utilizing a standardized test will show actual competency of a skill. Ideally, the cumulative raw scores for each skill activity should be collected. There should also be an indicator that the skill's test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the number of failures is available. Missed performance skills and number of exams taken should also be tracked.
DL Skills/Road Test(s) Pass/Fail Rates If there is an extreme of passes or fails, the skills/road test(s) may be too easy or too difficult. May indicate a need for changes to the skills/road test(s) or scoring criteria. If this portion of the driver license exam is conducted by driver education providers, States could use this information as grounds for an audit of a provider or instructor. This information can also be used to further evaluate any outcome information (crashes/citations/convictions) that occur after obtaining the license.	States should ensure that a State standardized exam is being utilized and all testers have been trained on how to collect data and evaluate skills. Utilizing a standardized test will show actual competency of a skill. Ideally, the cumulative raw scores for each skill activity should be collected. There should also be an indicator that the skill's test score passed or failed the required criteria. This should be recorded for each test attempt so that information on the number of failures is available. Missed performance skills and number of exams taken should also be tracked. Student assessments that remain consistent across a program will validate data.

Data Field and Rationale	Guidance
DL Testing Waiver Noting when a testing waiver is used for obtaining a license will allow for an evaluation of the effectiveness of this option. Future reviews can be done on testing waiver licensee's citation, conviction, and crash data. Can indicate if students who took exams or students who obtained a waiver are more/less likely to be involved in a crash, receive a citation, etc.	States may allow a testing waiver if a student completes driver education. It is recommended to require final exams during driver education courses regardless of waiver status that is equivalent to the State exam.
Specialized DL Testing Verifies that testing inclusion was truly met for the applicant. Repeat testing or poor scores are an indicator regarding the course modification(s) and the course's difficulty depending on the type of exam taken and the individual takin the exam.	Driver licensing exams are often administered in multiple languages, with written and verbal or voice text, and may have extraneous words eliminated, or the number answer choices reduced. If automated exams are not available an interpreter may be allowed to read the text. If an applicant needs an adaptation or modification to the vehicle to perform the task, it will make a difference if they take the exam in their own personal vehicle vs. a testing vehicle at a facility. Compare testing scores with no assistance to specialized testing.
Number of DL Testing Attempts Repeat testing could prove to be a valuable indicator regarding the test difficulty.	All make up tests include number of tests, skills missed, scores and completion status.
DL Testing Location(s) Assist in identifying specific locations that may have higher failure rates or questionable passing rates. Indicator of needed improvement. Will also help when looking at accessibility and equity.	Testing locations could be open (on roadway) or closed (on a range). Tester should have a minimum of two testing route locations. Location of route location should be indicated on the student's test record. Compare scores on different testing routes. Compare scores by type of exam location.

Data Field and Rationale	Guidance
DL Examiner ID Information will assist in establishing trends within examiners and testing methods by location and examiner. Identify if Examiner training is needed when compared with test scores.	Testing providers could be the driver licensing agency, Third-party Examiners, or approved driver education programs. Information collected for testing. • facility location • examiner id or name • type of exam • delivery of exam • date/time • number of attempts • score • questions missed • modifications/adaptations The examiner needs to maintain these records and all data should be sent to one location, usually the driver licensing agency.
Permit Issuance Data	
Date Issued The permit issuance date is an indicator of whether a teen got a permit as soon as they were able or waited. This information can be utilized to evaluate when teens are entering the licensing system and completing full licensure.	The issue date of a learner permit and driver license is indicated on the card/paper given to the students. Valid permits must be shown and on the student's person before they drive. Issue dates, as well as expiration dates, will indicate the length of time the student has held the learner permit or license. Compare the issue date of permit issuance compared to the issue date of full licensure. Comparing birth dates and issue dates of permits and stages of licensing will assist with the age in which a student started a course, how long it took them to complete the stages of the course, and even length of time given for supervised driving practice. When compared with driver education course completion data, crash, citation (if available), and conviction data, this information can show indications of the effectiveness of driver education.

Data Field and Rationale	Guidance
Renewals Tracking permit renewals is an indicator of applicant's learning gaps or test failures.	Learner Permits are used during driver education or the learning phase prior to licensing. By tracking the number of permit renewals and surveying students/applicants or with a check box on the renewal, States can collect data on why the permit expired prior to the completion of the program.
Licensure Issuance Data	
Verification of Supervised Practice The Graduated Driver Licensing (GDL) system has been proven to be the most effective countermeasure for reducing teen fatalities. Supervised driving practice is a critical component of the GDL system. Requiring supervised practice driving is inconsequential if it is not verified. Parent/Guardian involvement has proven to be a major factor in student success. If submitting a supervised practice log is required and must be collected for licensure, parents/guardians will be more inclined to participate. Further, collecting this data can help evaluate the effectiveness of parent/guardian involvement. If students who have a parent/guardian involved are more successful in completing driver education, this would indicate a need to develop and advocate for initiatives involving parents/guardians.	If the State Driver License agency collects parent/guardian supervised driving logs, it will encourage students to practice (which gives them real-life driving experience and can help determine readiness) and compels parents/guardians to participate in their teen's learning-to-drive experience. Using an electronic parent/guardian participation log sheet more accurately indicates parent/guardian participation and practice. Apps are available at no cost and provide a way for parents/guardian to record each supervised driver.
Type Having access to the data for license types that a person carries can be used to cross-reference with CDL and endorsements (like motorcycle) data. If a person is convicted of a violation or involved in a crash in a vehicle, it can be linked.	License types are indicated on the driver license. A universal coding system is used across the country to maintain consistency. Class A, B, C, D, and M (motorcycle) licenses are going to be significant to the type of vehicle size or regulatory requirement. The type of licenses issued will indicate the type of vehicle transportation or career the license holder would seek.

Data Field and Rationale	Guidance
Date Issued The license issue date will indicate validity and guide law enforcement officers about any restrictions listed on the license. Also helpful in determining length of licensure before receiving a citation or being involved in a crash.	GDL phases will be guided by issue date and restrictions given on the permit or license. Comparing birth dates, issue dates of licensure, and stages of licensing will assist with the age in which a student started a course, how long it took them to complete the stages of the course, and even length of time given for supervised driving practice. Compare issue date of permit issuance compared to the issue date of full licensure.
Revocation Information Data can be used to make program, curriculum, and law changes. Can verify if a person who had a license revoked took driver education. Indicator of driving skills/safe driving.	Potential penalties generally include a fine, traffic school, demerit points on driver record, suspension/revocation, or redoing a licensure phase. The most common reason for a license revocation is due to a civil or criminal action by the court system. Court and law enforcement data can help with comparing age of person during the violation, type of violations, and most common reason for license revocation and for how long. This information can also be compared to crash data.
Suspension Information Suspension information can be used to make program, curriculum, and law changes. Can verify if a person who had license suspended took driver education. Indicator of driving skills/safe driving.	Potential penalties generally include a fine, traffic school, demerit points on driver record, suspension/revocation, or redoing a licensure phase. The most common reason for a driver license suspension is for a traffic violation involving impairment, insurance, and/or involving property or personal damage. Court and law enforcement data can help with comparing age of person during the violation, type of violations, and most common reason for license suspension and for how long. This information can also be compared to crash data.
Withdrawals This is a license status. The reasons for withdrawal could be used for curriculum changes or parent information packets.	Parent/Guardian, Law enforcement, courts, and medical personnel can revoke or withdraw the right to hold a permit or driver license. The driver license agency and the State or county court system maintains the status of a license and the reason. Withdrawals are most often invoked due to a medical reason or convictions. Obtain data from the driver licensing agency and the court system to determine reasons for license withdrawals, if available.

Enforcement Data

Data Field and Rationale	Guidance
Traffic Violations Traffic violation data evaluates if teens who took driver education are receiving violations or not. Need for continued training for problematic drivers. Potential to help change curriculum content to lower the instances of traffic violations by young novice drivers. Further, analyzing pre-licensure data on traffic violations committed by novice teens during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	Driving-related offenses range in seriousness and are typically categorized as infractions, misdemeanors, and felonies. Analyzing reliable and accurate traffic records data is central to identifying traffic safety problems and designing effective countermeasures to reduce injuries and deaths caused by crashes. The prediction of traffic-violations using data mining techniques, more specifically, when most likely a traffic violation may happen. Also, what are the contributing factors that may cause more damages (e.g., personal injury, property damage, etc.). The national database (a sample database, not a census) for traffic-violations is considered for the mining and analyzed results indicated that a few specific times are probable for traffic-violations. Moreover, most crashes happened on specific days and times. The findings of this work could help prevent some traffic violations or reduce the chance of occurrence. These results can be used to increase cautions and traffic-safety education.
Traffic Citations Traffic citation data evaluates if teens are receiving citations or not. Need for continued training for problematic drivers. Potential to help change curriculum content to lower the instances of traffic citations by young novice drivers. The information from this data can guide determination of what day of the week, time of day, and location drivers are receiving traffic citations. It can also show what age a person is receiving citations. For example, are students on learner permits violating license restrictions or are new drivers violating State graduated driver licensing laws. Further, analyzing pre-licensure data on novice teen traffic citations received during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	Citation data includes driver information, date/time, location, and type of violation. The goal is to collect demographic data on arrests, stops, and searches to determine if there are troublesome trends. The goal is to collect demographic data on arrests, stops, and searches to determine if there are troublesome trends. Each police agency, in most States, collect the data from the citations into one Statewide data base. To collect proper data to see if traffic citations are making a difference, there needs to be a directed effort over a period of time on the same roadway, at the same time of day, for the same violations.

Data Field and Rationale	Guidance
Traffic Crashes Traffic crash data evaluates if teens are involved in crashes and severity of crashes. Need for continued training for problematic drivers. It has the potential to help change curriculum content to lower the instances of traffic crashes by young novice drivers. The information from this data can guide determination of what day of the week, time of day, and location drivers are crashing. It can also show what age a person is involved in a crash. For example, are students on learner permits violating license restrictions or are new drivers violating State graduated driver licensing laws. Further, analyzing pre-licensure data on novice teens involved in crashes during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	Crash-level data contains information about the entire crash, such as crash location, crash date, total fatalities/injuries in the crash, and whether alcohol was involved in the crash. There are many federal data sources that provide national estimates on real-world traffic crash data for fatalities, injuries, causation factors (primary prevention), occupant protection (crashworthiness), and safety program evaluations. Crash Investigation Sampling System (CISS) randomly selects thousands of police crash reports at law enforcement agencies in selected areas across the country. The areas reflect the geography, population, miles driven, and crashes in the United States. To be eligible for the CISS sample, a crash must involve at least one towed passenger vehicle. There are four main types of data analysis to be aware of: 1. Descriptive analytics: What happened? 2. Diagnostic analytics: Why did it happen? 3. Predictive analytics: What is likely to happen in the future? 4. Prescriptive analytics: What is the best course of action to take? Stop data can provide concrete evidence of how well a given tactic works and what impact it has on the public. Doing so without stop data is impossible. For example, stop data can be used to assess the impact of stops on traffic safety. Some research has suggested a link between traffic enforcement (e.g., pursuing moving and non-moving violations) and improved traffic safety, although, the relationship is not as strong as one might expect.

Data Field and Rationale	Guidance
Chemical Testing Chemical testing helps to identify if teens are driving under the influence. If so, identify the most likely age groups and other trends. Potential to help change curriculum content to lower the instances of driving under the influence by young novice drivers or young adults.	Varying State standards set guidelines to determine legal BAC levels for driving. The primary source of alcohol-related motor vehicle crash injury data is the NHTSA State Data System (SDS). The SDS is based on data from police crash reports submitted by participating States. Most States participating in the SDS collect and provide information about alcohol involvement in motor vehicle crashes.
Reconstruction Reports Reconstruction reports help to identify if a teen who was involved in the crash was also a driver education student. Can compare with person's test results and course performance to see if other safety indicators are present and make improvements to program.	Reconstructionists conduct crash analysis and reconstruction to identify the cause of a crash and contributing factors including the role of the driver(s), vehicle(s), roadway, and general environment. Crash reconstruction is sometimes used as the basis of expert witness testimony at trials. Crash reconstructions are often performed in cases involving fatalities or personal injury. Results from crash reconstructions are also sometimes used for making roads and highways safer, as well as improving safety aspects of motor vehicle designs. The primary objective of crash reconstruction is to determine the cause of the crash, the contributing factors, and the sequence of events.

Adjudication Data

Data Field	Guidance
Traffic Convictions Traffic conviction data helps to identify what traffic convictions are posted to the driver record for teens. Identify trends in order to make curriculum changes to lessen the instances of traffic violations/convictions by novice teen drivers. Further, analyzing pre-licensure data on novice teen traffic convictions that occur during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	A motor vehicle report (MVR) will display citations, convictions, arrests, suspensions, and revocations. Most information is displayed for three (3) years, depending on the State. DUI or drug-related charges will display for ten (10) years, depending on the State.
Driver Sanctions Identify trends in order to make curriculum changes to lessen the instances of traffic violations/convictions by novice teen drivers. Further, analyzing pre-licensure data on novice teen driver sanctions that occur during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	Sanctions can be imposed on a driver through the court system or an administrative action by SDLAs.

Post-Adjudication Data

Data Field	Rationale
Remediation Referrals and Compliance Collecting data on remediation referrals and compliance will show if teens who took driver education are referred to remediation and did/did not comply. Identify trends in order to make curriculum changes to lessen the instances of traffic violations/convictions by novice teen drivers. Further, analyzing pre-licensure data on novice teen drivers who were referred to remediation during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	Also referred to as deferred prosecution of traffic infractions. When an individual charged with a traffic violation is referred to traffic school or other school, class, or remedial or rehabilitative program. Usually, State motor vehicle agency oversees the traffic school/defensive driving courses and would have data on who attends as well as on an individual drivers record. Data should show that driver improvement intervention, in general, is associated with small but significant reduction in both crashes and violations.
Problem Solving Courts (Young Driver, DUI, etc.) Problem solving court data will show if teens went to problem solving court and why. Assists with identifying trends in order to make curriculum changes to lessen the instances of traffic violations/convictions by novice teen drivers. Further, analyzing pre-licensure data on novice teen drivers who entered problem solving court during the driver education course can assist in identifying if driver education has an impact on decision making (i.e., risk management, safe driving behavior, etc.).	States may require an individual to complete one or more classes or programs to reinstate a suspended or revoked driver license. Most States don't have a Statewide traffic school or defensive driving program, but individual courts often allow traffic school to dismiss a citation. A few States may even require drivers to take a traffic school course, depending on how many tickets and the severity of violations. In these cases, there would be notification by the driver license agency, the court, or other administrative agency. The driver license agency, the court, or other administrative agency who oversees the program will have data on the type of violations, who attends them, and the recidivism rates.

State Crash and Injury Data

Data Field	Rationale
Crash Type Identifies the severity of crashes. Typically labeled as fatal, injury or property-damage only. Data can be reviewed on crash types by the age of the driver, with a focus on young drivers to identify potential changes to driver education curriculum.	Traffic Crash Analysis can be used to analyze crash data and identify streets and intersections where concentrations of serious and fatal crashes occur. Safety is one of the most important factors to consider when evaluating a road network. Crash data can be found at a State's Office of Highway Safety, the US Department of Transportation Motor Vehicle Safety Division, National Highway Traffic Safety Administration, the Reporting and Information Division, and National Center for Statistics and Analysis. The purpose of crash data is to help decision-makers understand the nature, causes, and injury outcomes of crashes. This information provides context for the design of strategies and interventions that will reduce crashes and their consequences.
Location Identifies the locations where crashes happen. The types of locations can be used for curriculum enhancement and notices to parents in the driver education program.	Traffic Crash Analysis can be used to analyze crash data and identify streets and intersections where concentrations of serious and fatal crashes occur. The most common places that experience automobile crashes are rural areas, interstates, intersections, and parking lots. A crash site analysis approach is employed for most roadways. In other words, the analysist looks for hot spots (cluster of crashes) to surface and then develops countermeasures based on the crash type. The purpose of crash data is to help decision-makers understand the nature, causes, and injury outcomes of crashes. This information provides context for the design of strategies and interventions that will reduce crashes and their consequences.
Vehicle Types Involved Identifies if specific types of vehicles are involved in crashes. The types of vehicles can be used for curriculum enhancement and notices to parents in the driver education program.	The age, weight, and maintenance of the vehicle involved will provide important data points regarding vehicle safety. The analysis of millions of data points gives an understanding of hard braking events, weather conditions, traffic flow, and vehicle speed, as well as real-time traffic intelligence and historical insights into traffic incidents.

Data Field	Rationale
Most Frequent Crash Locations Identifies locations where crashes happen more often and can lead to roadway improvement. The local locations of crashes can be used for curriculum enhancement and notices to parents in the driver education program.	Traditionally, a crash site analysis approach is employed for most roadways. In other words, the analysist looks for hot spots (cluster of crashes) to surface and then develops countermeasures based on the crash type. Involves selecting locations that have high potential for reductions in crashes through the introduction of targeted safety improvements. The approach relies on crash analyses to first identify safety problems before a solution is sought. Traffic Crash Analysis can be used to analyze crash data and identify streets and intersections where concentrations of serious and fatal crashes occur. The primary data source for crash reduction in a specific location is typically police crash reports. This data should provide crucial information, which at a minimum should include the crash severity and the number of each injury severity type. The causation of the crash at these locations is important for guiding education, training and behavior change of students who drive or will be driving in these locations.

Data Field	Rationale
Injury Indicates the level of injury sustained when individuals. Typically fatal, serious injury, moderate injury, minor injury, or no injury are the classifications. The level of injury can be used to enhance the curriculum and for parent handouts.	Traditional crash-severity modeling uses detailed data gathered after a crash has occurred (number of vehicles involved, age of occupants, weather conditions at the time of the crash, types of vehicles involved, crash type, occupant restraint use, airbag deployment, etc.) to predict the level of occupant injury. The most common approach to statistically modeling the frequency of crashes and injury severity is to start with a crash-frequency model (to study the number of crashes that have occurred on a specific road segment or intersection in a specific period of time). Next, consider the injury severity of the crash (often defined is the most severe occupant injury observed in the crash) conditional on the crash having occurred. By considering this conditional crash-specific severity, the many details relating to the crash (number of vehicles involved, age of occupants, weather conditions at the time of the crash, types of vehicles involved, crash type, occupant restraint use, airbag deployment, etc.) can be considered in the development of a statistical model of severity using detailed crash reports. However, the use of such detailed data makes it difficult to forecast changes in injury severities because crash-specific data elements need to be known. Given this, there is considerable appeal in developing some combination of frequency and severity models that are less data intensive than the traditional conditional-severity approach. Such models could be readily used for network screening (ranking of sites in need of safety countermeasures) and help identify at least some influential factors that affect the level of injury-severities.
Fatality The most severe injury level from a traffic crash is a fatality. Data from fatal crashes can be used to enhance the driver education program in an effort to reduce fatal crashes and for parent handouts.	Data can be found using Fatality Analysis Reporting System (FARS). The FARS data is obtained solely from the States' existing documents: Police Crash Reports. State Vehicle Registration Files, State Driver Licensing Files, State Highway Department Data, Vital Statistics, Death Certificates, Coroner/Medical Examiner Reports, and Emergency Medical Service Reports. FARS data can be queried at: Fatality Analysis Reporting System | NHTSA.

Other Data

Data Field and Rationale	Guidance
Medical Data	
Medical Examiner Data Medical examiner data identifies medical information regarding teens involved in a crash and severity of the injuries. Data is typically at a summary level as information on individual cases would be a HIPAA violation due to the medical information. This data can be used to compare types of injuries, costs, locations, age of driver, passengers which can enhance curriculum and provide parents with information about teen drivers.	Collect and compare types and causation of injuries to driver and passengers. Injuries related to type of crash direction, seat belt use, speed, seating position, and impact location. State Administrators can also compare injury types to crash data information. This information is not available to the public but is available in quantitative reports provided by local health department and EMS Registry. States should have a person from EMS registry on teen driver administrative task force.
Trauma Registry The Trauma Registry identifies medical information regarding teens involved in a crash and severity of the injuries. This data can be used to compare types of injuries, costs, locations, age of driver, passengers which can enhance curriculum and provide parents with information about teen drivers.	Data available from local, State, and national registry. State Hospital Data Registry. Department of Health and Human Resources. State Bureau of EMS, Department of Public Safety. Utilize data from National Trauma Data Standards (NTDS) and Patient inclusion criteria. States publish this annually. • Injury prevention • After injury occurred • Seat belts • Airbags • Head injuries • Sent to medical examiner office, • Involvement of alcohol, drugs, passenger, driver, etc. A State trauma registry collects data of demographics, injury information, pre-hospital information, emergency department information, hospital procedure information, pre-existing conditions, diagnosis information, hospital evens, outcome information, financial information, Trauma Quality Improvement Program (TQIP) Measures for processes of care, and surgeon specific reporting.

Data Field and Rationale	Guidance
Hospitalization Data Use hospitalization data to compare types of injuries, costs, locations, and the ages of drivers and passengers which can enhance curriculum and provide parents with information about teen drivers.	This information can be collected by EMS Registry or State trauma registry. Types of data collected are demographics, injury information, pre-hospital information, emergency department information, hospital procedure information, pre-existing conditions, diagnosis information, hospital evens, outcome information, financial information, TQIP Measures for processes of care, and surgeon specific reporting. All information from crash reports can be quantified and qualified by using data from both locations. The crash report gives minimal level information, and the trauma registry will give more detailed information about the injury.
Emergency Medical Services Data Emergency medical services data can be used to enhance the driver education curriculum and as a handout to parents about the impacts of errors by teen drivers that lead to crashes.	The National Emergency Medical Services Information System (NEMSIS) is the national system used to collect, store, and share EMS data from the U.S. States and Territories. NEMSIS develops and maintains a national standard for how patient care information resulting from prehospital EMS activations is documented.
Insurance Claim Data	
Crash Claim Data Crash claim data can be used to enhance the driver education curriculum and as a handout to parents about the impacts of errors by teen drivers that lead to crashes. Reviewing insurance claim data can be used to determine crash type and damage caused to the vehicle. It would be possible also assist with the knowledge and use of advanced vehicle technologies during and after driver education and parent handouts.	All-payer claims databases (APCDs) are large State databases that include medical claims, pharmacy claims, dental claims, and eligibility and provider files collected from private and public payers. APCD data are reported directly by insurers to States, usually as part of a State mandate. Insurance companies share claims history with each other using databases such as C.L.U.E. (Comprehensive Loss Underwriting Exchange), which is run by Lexis Nexis and contains claims data from more than 99% of car insurance companies.
Roadway Data	
Inventory All States must maintain an inventory log of the types, length, and attributes for the public road system in their State. This data is used to determine crash rates by roadway type.	Traffic Crash Analysis can be used to analyze crash data and identify streets and intersections where concentrations of serious and fatal crashes occur. Safety is one of the most important factors to consider when evaluating a road network.

Data Field and Rationale	Guidance
Roadway Classification As part of the roadway inventory there are multiple types of roadway classification such as interstate, federal highway, State highway, or local streets.	Crash rates are calculated by dividing the total number of crashes at a given roadway section or intersection over a specified period of time. One of the factors identified is the roadway classification. The results are ranked from highest to lowest crash frequency. Locations with relatively higher crash frequency are selected as possible sites for detailed training or changes. Classification is most generally shown in crash and fatality rates between rural and urban roadway functional class.
Roadway Location Roadway locations use a mile marker or "distance from" measurement. Crash and medical reports will use the location measurement for identifying where a crash occurred, or where there are certain features (like traffic control devices, curve warning signed, guardrails). The location data is used to aggregate crash reports in order to identify hot spot or corridors in need of attention.	Crash frequency data by crash type or crash severity to identify locations with high crash severity or focus on a specific crash type – for example roadway departure crashes. Crash frequency is an attractive quantitative screening technique because the only data required are crashes and their physical locations. Other data like traffic volume and roadway features are not necessary. The most basic method of displaying and evaluating crash frequency data is to summarize the total number of crashes over the analysis period by location. It is then possible to identify those locations with the highest crash frequencies. Crash frequencies also can be calculated by crash type, such as fatal crashes or incapacitating injury crashes
Traffic Controls Stop signs, signals, school zone warning signs are all types of traffic control. Crash reports and traffic violations, citations, and convictions will note what type of traffic control was disobeyed if that was an error in the crash or driving behaviors.	Citation data and Crash reporting data can be used to determine if the driver failed to obey a traffic control device.
Vehicle Miles Traveled Vehicle miles traveled is how transportation agencies create crash rates. There are some studies that can estimate the miles driven by age groups, which then create crash rates by age. Teen drivers drive less than the main adult groups.	To determine the average miles driven per year on a vehicle, take the vehicles total mileage and divide it by the age of the vehicle. Track mileage because the more miles driven, the more opportunity to be involved in a crash or other event.

Data Field and Rationale	Guidance
Census Data	
Population Data Population data from the US Census allows the Driver Education Program Administrator to see the current and forecasted number of teens that will be eligible for driver education by local areas (census tracts).	The US Census has data that is based on small areas called census tracts to assist in determining where and how frequent courses should be available.
Sociodemographic Information Sociodemographic data are characteristics of a population. Generally, characteristics such as age, gender, ethnicity, education level, income, type of client, years of experience, location, etc. This information about the State's population the driver education program serves, supports the placement of courses, languages used in the course, and potential of financial subsidies.	Identified subgroups within a population displaying different profiles of driving exposures and assessed sociodemographic predictors and differences in age, gender, education, and training across these classes.
Vital Statistics Driver Education Program Administrators can use vital statistics when forecasting budget requests and upcoming demands for services.	Vital statistics are in reference to the population.
Driving Behaviors/Habits Data related to driving behaviors/habits can be very helpful when crafting the parent/guardian materials as the parents/guardians are exhibiting those same driving behaviors and habits that the survey results cover.	National, regional, and local surveys are done that include driving behaviors and habits.
Exposure Data	
Driving Time Collecting data related to driving time can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	The amount of driving time a teen is behind the when is lower than middle-aged adults. This emphasizes the importance of establishing good driving behaviors and habits at the early stages of the individual's driving career.
Driving Distance Collecting data related to driving distance can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	The driving distance for teen drivers is much shorter than middle-aged adults. This emphasizes the importance of establishing good driving behaviors and habits at the early stages of the individual's driving career.

Data Field and Rationale	Guidance
Traffic Circumstances Collecting data related to traffic circumstances can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Prevailing traffic conditions means the road conditions and traffic laws as may apply and govern the functions required to safely navigate traffic. Traffic refers to all the vehicles that are moving along the roads in a particular area. States' transportation departments and highway safety offices monitor traffic conditions, traffic flow, and miles driven.
Weather Collecting data related to weather can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Slippery roads, less tire traction, increased crash risks and heavier traffic flow can all lead to weather-related car crashes. Weather events that could impact road conditions; Visibility distance (due to blowing snow, dust, fog), Lane obstruction (due to wind-blown snow, debris). Weather conditions will be indicated in all crash reports. Weather conditions are stored at the Transportation Department and at the Road Weather Information System. A Road Weather Information System (RWIS) is comprised of Environmental Sensor Stations (ESS) in the field, a communication system for data transfer, and central systems to collect field data from numerous ESS. The National Weather Service (NWS) provides weather, water, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas, for the protection of life and property and the enhancement of the national economy.

Data Field and Rationale	Guidance
Perception and Attitude Drivers' road safety attitude and risk perception are two important behavioral issues in road crashes. An attitude comprising of affective, cognitive, and behavioral components reflects individuals' evaluation of situation, events, people, etc. Road safety attitude is divided into two groups: general attitudes towards traffic safety, and special attitudes towards speed, drinking and driving, consideration for the other road users and responsibility. Drivers' attitude affects risk of road. Collecting data related to perception and attitude can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Negative attitudes on the road can lead to crashes and even serious injury. Aggressive driving is when a driver operates their vehicle recklessly, often because they're frustrated, angry or impatient. Risk perception refers to drivers' experience of risk in potential traffic hazards. Individuals' perceptions and attitudes are formed by their role models. Positive and interactive parents who become involved and set boundaries for their new student driver will develop a teen driver who understands the responsibility of driving and will be at less risk of becoming a poor driver. It is very common for a teen to drive or immolate poor behavior and attitudes if their role model has such behavior. Studies have observed a significant positive correlation between drivers' risk perception and perception of driving tasks and found that both perceptions significantly affect drivers' road safety attitude. Risk perception partially mediates the relationship
Injury Surveillance Collecting data related to injury surveillance can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Injury surveillance is the ongoing collection of data describing the occurrence of, and factors associated with, injury. They would collect data such as the role of airbags in a fatal crash. The seat position of the driver in a crash. The data would be used to prevent injuries in the future. Data is collected by the Centers for Disease Control and Prevention (CDC). Data and information are also collected by trauma centers and by the Insurance Institute for Highway Safety. Collecting injury and fatality data in real crashes and in simulated or intuitional research crashes can determine what is the safest vehicle to driver, for example.

Data Field and Rationale	Guidance
Behavior Surveillance Collecting data related to behavior surveillance can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Behavior surveillance can be determined by technology or youth risk behavior system questionnaires. Technology based systems use live cameras to monitor and record individual patterns of movement or behavior. A questionnaire can be taken by a teen to determine their risk factors. These questionnaires are anonymous and collect data on gender, age, ethnic origin, and education level. The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of telephone surveys that collect State-level data about health risk behaviors, chronic health conditions, and use of preventive services. Usually administered by the Center for Disease Control and Prevention. However, State Education Department works closely with the Health and Welfare system to do these studies in the classrooms across the State annually in 9th grade and bi-annually in 11th grade. Driver Education Program Administrators would be able to obtain this data from either of those agencies. By working closely with these agencies Driver Education Program Administrators could ask them to include traffic safety and driving behavior questions in their surveys. Examples would be, do you use a seat belt, do you require everyone who gets into your car to wear a seat belt, have you ever texted while driving, drove under the influence, driven drowsy, were you a passenger in a vehicle where the driver was under the influence, etc.
Naturalistic Driving Data Naturalistic driving data can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Naturalistic driving is the study of the driver's behavior. Typically, by equipping the car with several small camaras and sensors, which continuously and inconspicuously register vehicle maneuvers, driver behavior, and external conditions. Data collected from camaras and sensors would be used to determine driver behavior and driver skill levels. This data is not as objective or biased as a person or examiner would be in the same conditions.

Data Field and Rationale	Guidance
Geospatial Data Enables States to acquire data that is referenced to the earth and use it for analysis, modeling, simulations, and visualization. Geospatial data can help to establish trends for novice teen drivers that can then be used to enhance the driver education program.	Geospatial data includes information related to locations on the Earth's surface. Administrators can map objects, events, and other real-world phenomena to a specific geographical area identified by latitude and longitude coordinates.