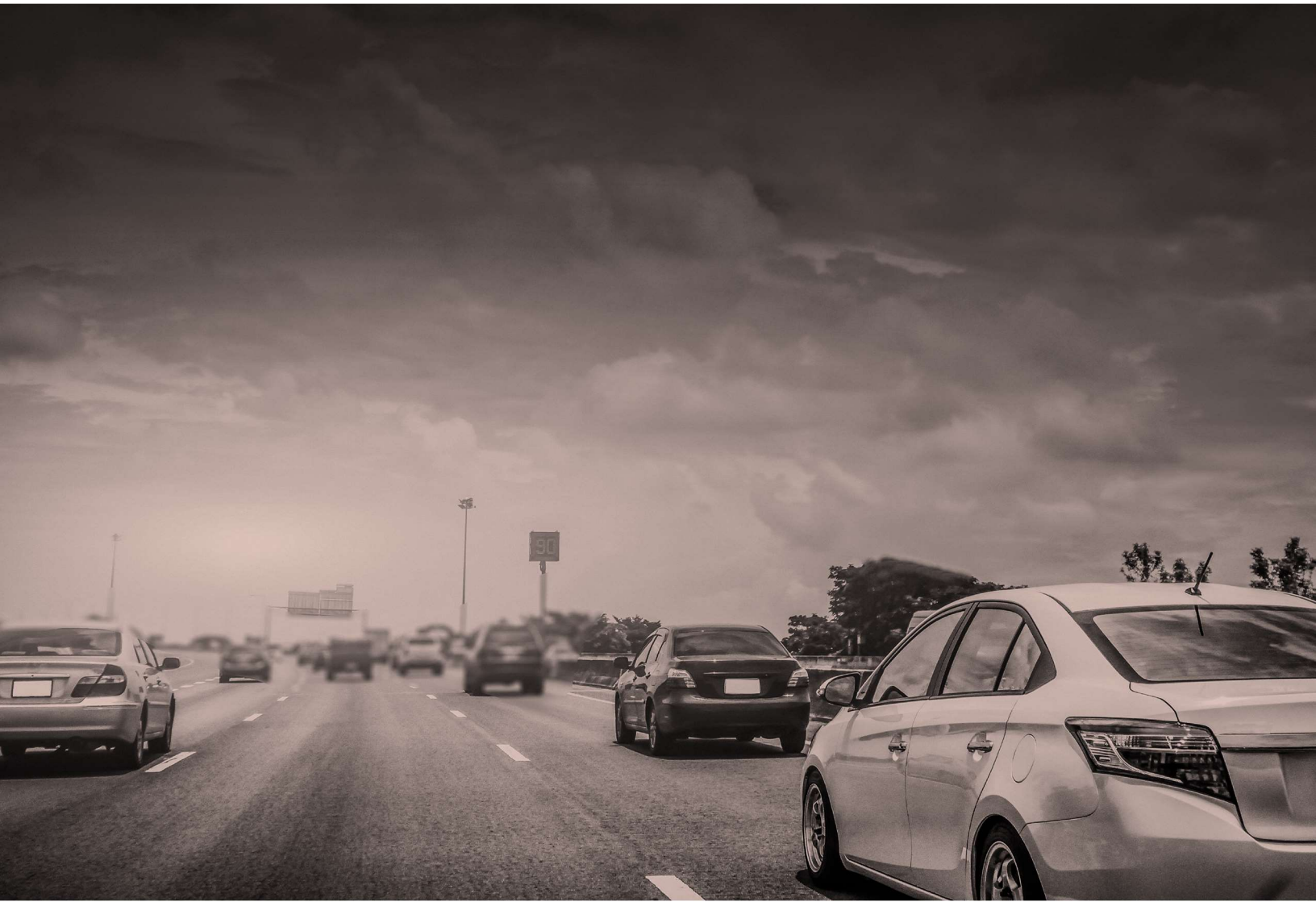
State of Ohio
Traffic Records Coordinating Committee
5 Year Strategic Plan
FFY 2021 – FFY 2025



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Executive Summary

The State of Ohio Traffic Records Coordinating Committee (TRCC) provides coordinated leadership for the improvement of traffic safety information systems at all levels of government. Committee members represent agencies throughout the state that are involved in owning, operating, collecting, and using traffic records and public health injury control data systems.

The FFY2021 – FFY2025 TRCC Strategic Plan builds on previous successes and addresses key deficiencies in Ohio's traffic records systems. Goals and objectives outlined in the plan are based upon recommendations provided in the 2020-2021 State of Ohio Traffic Records Assessment conducted by the National Highway Traffic Safety Administration (NHTSA) and an internal review of deficiencies within Ohio's traffic records system. TRCC members involved in the development of the plan also considered goals outlined in the Ohio Strategic Highway Safety Plan (SHSP) and the FFY2022 Highway Safety Plan (HSP).

TRCC's strategic goals over the next five years address six core traffic records system components, as well as overall data use and integration:

- CRASH: Improve the applicable guidelines and data quality control program for the crash data system.
- VEHICLE: Improve the procedures/process flows, interfaces, and data quality for the vehicle data system.
- DRIVER: Develop and implement a formal, comprehensive driver data quality management program.
- ROADWAY: Integrate all roadway data sources and develop quality control measures for the enterprise roadway data system.
- CITATION/ADJUDICATION: Improve the applicable guidelines, data dictionary, and data quality control program for the citation/adjudication systems.
- EMS/INJURY SURVEILLANCE: Develop procedures and standards for improving Ohio's Injury Surveillance System (ISS) data quality and oversight.
- DATA USE AND INTEGRATION: Improve the traffic records systems capacity to integrate data.

TRCC-sponsored projects included in the plan further support the committee's strategic goals. Projects are selected if they positively impact the timeliness, accuracy, completeness, uniformity, integration, and/or accessibility of Ohio's traffic data. The plan is updated annually and includes a brief summary of major milestones or accomplishments achieved in the most recently completed grant year.

State of Ohio Traffic Records Coordinating Committee

The State of Ohio Traffic Records Coordinating Committee (TRCC) was established as required by 23 C.F.R. § 1200.22. The mission of the Ohio TRCC is to provide strong, coordinated leadership in order to maximize the efficiency and effectiveness for traffic safety information systems. TRCC members support data improvements at all levels of government in an effort to minimize duplication, improve uniformity, advance electronic data collection, and facilitate data access and use. The goal of this coordinated effort is to work towards zero fatalities on Ohio's roadways.

The Ohio TRCC is organized into two bodies: an Executive Council and a Technical Council. Organizational representation and membership of both councils is established in the State of Ohio TRCC Charter (see Appendix A), which is updated annually and approved by the Executive Council. The Director of ODPS serves as the Chair of the Executive Council. Executive Council membership includes the director, or director's designee, of the following agencies:

- Ohio Department of Public Safety
- Ohio Department of Transportation
- Public Utilities Commission of the State of Ohio
- Supreme Court of Ohio

The Executive Council establishes and oversees the mission of the TRCC. The Executive Council meets at least once during the calendar year to be briefed on the work of the Technical Council, approve the Charter and to provide guidance for the Technical Council.

The Chair of the Executive Council is responsible for appointing the Chair of the Technical Council. The Chair of the Technical Council is then responsible for selecting another member of the council to service as Vice Chair. The Technical Council has a multidisciplinary voting membership that includes owners, operators, collectors, and users of traffic records and public health and injury control data systems:

- ODPS Administration
- Bureau of Motor Vehicles (ODPS-BMV)
- Emergency Management Agency (ODPS-EMA)
- Emergency Medical Services (ODPS-EMS)
- Ohio Criminal Justice Services (ODPS-OCJS)
- Ohio Homeland Security (ODPS-OHS)
- Ohio State Highway Patrol (ODPS-OSHP)
- Buckeye State Sheriff's Association (BSSA)
- Clerk of Courts Association
- County Engineers Association of Ohio
- Ohio Association of Regional Councils
- Ohio Chiefs of Police Association
- Ohio Department of Health (ODH)
- Ohio Department of Transportation (ODOT)
- Ohio Insurance Institute (OII)
- Public Utilities Commission of the State of Ohio (PUCO)
- Supreme Court of Ohio

Federal partners also participate on the Technical Council but serve as non-voting members. Represented agencies include the Federal Highway Administration (FHWA), Federal Motor Carriers Safety Administration (FMCSA), and National Highway Traffic Safety Administration (NHTSA). Federal partners participate in the development of project ideas and in project prioritization.

Meetings are open to the public and other traffic safety data stakeholders attend regularly and provide information to the Councils. Traffic safety data system partners are encouraged to bring forward project ideas for the committee's consideration.

The purpose of the Technical Council is to recommend the use of specific statewide resources to reduce traffic crashes on Ohio's roadways. In support of that purpose, the Technical Council reviews and evaluates new technologies, approves performance measures used to demonstrate progress, assists TRCC members with applying for federal funds, approves expenditures of Section 405c funds received by ODPS, approves changes to the TRCC strategic plan, and works collaboratively to share ideas and resources. To accomplish this purpose, the Technical Council has the authority to review any of the state highway safety data and traffic records systems and to create technical subcommittees. Administrative support for TRCC is provided by ODPS, through the Ohio Traffic Safety Office (OTSO).

See Appendix B for 2022 Executive and Technical Council membership rosters.

2020-2021 State of Ohio Traffic Records Assessment

The State of Ohio completed its most recent Traffic Records Assessment ("Assessment") administered by NHTSA in February 2021. As part of the Assessment, NHTSA evaluates the state's traffic data systems in six core areas: crash, vehicle, driver, roadway, citation/adjudication, and EMS/injury surveillance. A review is also conducted of the TRCC management, strategic planning, and overall data use and integration.

An outline of the Assessment recommendations is provided below, as well as the TRCC's brief response to each recommendation made at the time. Further explanation of the state's plans for addressing deficiencies within these six core areas can be found in the Goals and Objectives section of this document. Recommendations that are specifically addressed in this strategic plan are noted in the applicable response.

Crash Recommendations

Assessment Recommendation: Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: Quarterly report(s) are in place to track the process of rejected crash reports, the return of the corrected reports, and provide feedback to agencies. Performance measures and numerical goals will be developed to gauge data quality

Assessment Recommendation: Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: The crash data system does not currently interface with the driver, vehicle, citation, adjudication, or injury surveillance systems. Included in this strategic plan are objectives to begin exploring potential methods to build these interfaces and to improve existing interfaces.

Vehicle Recommendations

Assessment Recommendation: Improve the description and contents of the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: BMV is currently in the process of re-writing the vehicle registration database for integration into the driver license database. BMV is developing annotated vehicle data system documentation. The agency is also identifying the security provisions that protect data against fraud and protocols that regulate the release of vehicle data.

Assessment Recommendation: Improve the data quality control program for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.
Ohio TRCC Response: BMV is developing annotated vehicle data system documentation. The agency is also identifying the security provisions that protect data against fraud and protocols that regulate the release of vehicle data.

Driver Recommendation

Assessment Recommendation: Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: Planned revisions to the vehicle registration database will improve overall data quality.

Roadway Recommendation

Assessment Recommendation: Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: ODOT is currently developing a new roadway inventory management system. As part of this project, performance measures related to completeness and quality will be established.

Assessment Recommendation: Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: ODOT is currently developing a new roadway inventory management system. As part of this project, performance measures related to completeness and quality will be established.

Citation/Adjudication Recommendations

Assessment Recommendation: Improve the applicable guidelines for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: TRCC is reviewing the citation system's adherence to national guidelines. Recommendations will be made for improvements to applicable sections.

Assessment Recommendation: Improve the data quality control program for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: Performance measures for improving citation data quality are future goals for TRCC and will be explored as the system develops.

Assessment Recommendation: Improve the description and contents of the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: The TRCC will work with local partners to identify, develop and design comprehensive descriptions for Ohio's Citation and Adjudication system.

EMS/Injury Surveillance Recommendations

Assessment Recommendation: Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: Implementation of the new EMS data system (EMSIRS) is now complete. The purpose for the move was to allow for direct granular access to the data submitted to the state by local EMS providers. The trauma registry is in the process of being upgraded to a newer platform by the 3rd party vendor. Plans are already being made to upgrade the EMS registry from NEMSIS version 3.4 to 3.5 data schema. This will facilitate the eventual linkage of EMS and trauma registry data as NEMSIS version 3.5 incorporates a universal patient ID shared across both systems. Ohio has no plans to develop an emergency department data system.

Assessment Recommendation: Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Ohio TRCC Response: The new EMSIRS system provides those agencies providing data to the system to access to introductory data dashboards on various key items as submitted, and the related state aggregate data for comparison. As time and staffing permits over the next several years we plan on promoting the soft-rollout of this new feature as an enticement for improved local EMS engagement and demonstration of the benefits of accurate and timely data collection and submission. While data reporting is required in law/rule, there is no penalty for non-compliance so enforcement continues to be an issue.

Core Area Plan

The State of Ohio TRCC Strategic Plan provides a framework for coordinated efforts among state agencies that administer traffic records over the next five years. The goals and objectives outlined in this plan are based upon recommendations provided in the 2020-2021 State of Ohio Traffic Records Assessment, an internal review of deficiencies within Ohio's traffic records system, review of the state's SHSP and HSP, and guidance provided by the Ohio Traffic Records Coordinating Committee. Goals and objectives are organized by applicable data system and include performance measures and goal coordinator(s).

The timeline for each traffic safety information system's goals and objectives is organized into three tiers, as shown below.

- Tier One – Goals and Objectives to be accomplished in FFY 2021 (Year 1)
- Tier Two -- Goals and Objectives to be accomplished in FFY 2022 – FFY 2024 (Years 2 – 4)
- Tier Three – Goals and Objectives to be accomplished in FFY 2025 (Year 5)

The Ohio TRCC updates the strategic plan on an annual basis and also provides a summary of the most recently completed grant period's accomplishments. Performance measures are selected by the traffic safety information system business owner with input by the TRCC. Performance measures are collected on an annual basis.

Crash

Description

The continued development and deployment of a statewide, electronic crash submission system remains a priority for the State of Ohio. Per the Ohio Revised Code (ORC), all traffic crash reports involving personal injury and/or property damage in excess of $1,000 are required to be submitted to ODPS within five days. To support the electronic submission of traffic crash records, the state developed the Ohio Law Enforcement Information System (OLEIS) which is provided at no cost to law enforcement agencies. There are also a number of third-party systems that operate in the state. Since OLEIS has been made available, there has been a substantial increase in the number of crash reports being submitted electronically, and participation continues to improve. In 2021, there were 270,041 total traffic crashes in Ohio, and approximately 84% (225,701) of reports were submitted electronically. Year-to-date 2022, there have been 60,995 total traffic crashes, and approximately 81% (49,405) of reports have been submitted electronically. Currently, 260 law enforcement agencies are submitting crashes electronically using the OLEIS Crash Module.

The electronic crash process results in the instantaneous receipt of crash information. This eliminates the mailing and manual data entry of crash reports, therefore drastically improving both the timeliness and accuracy of Ohio's traffic crash data. Ohio crash data is publicly available on the ODPS website. Electronic crash submission functions are funded through federal grants provided to TRCC from NHTSA as well as through state agency funding sources.

Great strides have been made to ensure all agencies are submitting crashes, as required. With the transition to electronic submissions, deficiencies existed in the lack of follow-up to ensure electronic submissions were being received. Reports are now run on a routine basis; if a significant decrease is noticed in the number of agency reports, contact is made with the agency. Usually, there is either an IT issue or misunderstanding on how to complete the crash through all phases. Tracking now exists on paper crash reports that are returned to agencies for correction.

During 2018 and 2019, Ohio's crash report, the OH-1, underwent a significant re-write. A committee was assembled and met to ensure the integration of both ANSI D.16-2017 and Model Minimum Uniform Crash Criteria, Fifth Edition (2017). As a result of OH-1 changes, a complete overhaul of the platform on which Ohio received the data was made. These changes will require Ohio to develop a new crash data dictionary.

System Attribute Status

Attribute Area Status Crash Information System	
Timeliness	The Ohio Department of Public Safety has worked diligently to increase the number of law enforcement agencies to submit the Ohio Uniform Crash Report (OH-1) electronically. ODPS developed the Ohio Law Enforcement Information System (OLEIS) which is provided at no cost to law enforcement agencies. In addition to the OLEIS program, agencies may also utilize a third-party vendor. Once the crash is validated and approved, ODPS receives the crash data immediately. Additionally, the ORC requires agencies to submit crashes to ODPS within five days. On January 1, 2019, the new Ohio Uniform Crash report was released.
Accuracy	During the crash re-write, a committee met and thoroughly reviewed the MMUCC 5th edition and ANSI D.16-2017 to maintain compliance with the new mandatory elements. Validations were established to ensure that the crash elements are completed accurately prior to submission into the statewide crash data system.
Completeness	Once a crash is validated and approved by the law enforcement agency supervisor, the validations ensure that the report is accurately completed. The paper crash reports are also reviewed for completeness by staff prior to being sent and keyed by our third party vendor.
Uniformity	The Ohio Revised Code gives the Director of ODPS the authority to update Ohio's crash report, the OH-1. Electronic data is converted to mirror the paper form that has been approved by the ODPS Director.
Integration	Ohio shares the crash data to many stakeholders in efforts to reduce traffic crash fatalities. The data is provided externally and through FTP agreements to organizations that study crash trends and injuries. ODPS also works with ODOT and the BMV. These partnerships help keep Ohio's roadways safe.
Accessibility	The statewide crash database is used by internal and external stakeholders. ODPS has provided an external webpage that allows the public to search Ohio's crash data.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Increase electronic crash submission by 10% through promoting the OLEIS program and working with third party vendors. From prior year, electronic crash submissions increased another 3%. This brings the total electronic crash submissions to 80%
2. Complete the crash location mapping enhancement for the Ohio Trooper Information System (OTIS) and OLEIS.

FFY 2023 – FFY 2024 Goals and Objectives (Tier Two)

1. Achieve 90% reporting rate for agencies submitting crash reports electronically.
2. Create a more thorough and accessible crash statistics website.

3. Construct an in-house solution for a more effective crash diagramming in both OTIS and OLEIS.
4. Increase the frequency crash data is provided to partner agencies.

FFY 2025 Goals and Objectives (Tier Three)

1. Have 100% of agencies submitting electronically.
2. Develop a web-based crash reporting system to increase the efforts of obtaining electronic crash data.

Performance Measures

Crash Performance Measures 3-Year Analysis			
Measure	**FFY 2019**	**FFY2020**	**FFY2021**
Number of agencies submitting electronic crash reports. **Ohio has approximately 1,000 law enforcement agencies. From year to year, roughly 600 regularly submit at least one crash report each year.*	508 unique law enforcement agencies (by NCIC) have submitted electronically.	521 unique law enforcement agencies (by NCIC) have submitted electronically.	549 unique law enforcement agencies (by NCIC) have submitted electronically.
Percentage of submitted crash reports that are electronic.	76%	80%	83%
Mean number of days between crash date to submission of crash reports and availability online.	4.47	3.75	3.60
Percentage of crash reports returned due to errors.	4%	3%	

TRCC Funded Projects

Ohio Uniform Crash Manual Application

On December 17, 2019, the Ohio TRCC approved $202,000 to develop and implement an Ohio Crash Manual application. Crash reports could be improved by utilizing the Ohio Crash Manual. The application

would be developed to enhance the accuracy of crash reports, which in turn improves our data. The application can act as training source, a quick reference source, and a readable body.

General Funding Information

Ongoing system costs associated with the crash system are paid for by ODPS. System improvements are partially funded by special project funding through the TRCC.

FFY 2021 Accomplishments

The crash manual application was completed and it is being used successfully. ODPS is currently gathering statistical data as the application was recently released. The app average of 15 new Android and 5 App users every thirty days. Android install is around 330 while apple remains much smaller at around 70. The website continues to be used around 60 times per month, which is a good sign as those are active requests. In other words, an installed app may or may not be used in a month, while the web stats show actual, definite activity. We are seeing approximately 60 interactions per month. We send paper crashes back to agencies every couple weeks and it may be sometime before we get the return. The partnership was developed with the ODPS Easy Street Draw provider, Trancite. We were able to incorporate both the Ohio Crash Manual and the Easy Street Draw manual within the application. Many agencies utilize the Easy Street as their crash software and see this beneficial.

The Information Technology Section, is developing a new web based program called State of Ohio Law Enforcement Virtual Exchange (SOLVE). SOLVE will feature real-time data sharing, state-of-the-art data analytics, robust searching and reports, and a crash module. This will provide agencies an additional tool for crash submissions.

Traffic Safety Information System Coordinator

Tom Gwinn, Ohio State Highway Patrol, Ohio Department of Public Safety

Vehicle

Description

BMV completed a re-write of the vehicle registration database, effective November 11, 2019, for integration into the driver license database, enabling the two databases to share and link common data. This integration reduces errors, protects the integrity of data, and improves data collection, submission, processing, posting, and maintenance. This interface connectivity also improves the efficiency and cost effectiveness of the vehicle system.

The re-write of the vehicle registration database, processed vehicle registration data in real time through the Ohio BMV Business Application Services System (BASS), which is based on a .NET architecture. All the data fields or elements have values, and the system will only accept valid information for each field or element. With real time vehicle registration data and logic programmed into the BASS program, quality control is improved and data can be verified and accessed immediately. Currently, data auditing is performed on a routine basis by BMV field staff who frequently review transactions through electronic means and site field office visits. Trend analysis and random data sampling is performed routinely to review transactions for accuracy and fraud prevention.

BMV staff worked to develop annotated vehicle data system documentation. The documentation detailed the policies and procedures governing the collection, reporting, and posting of titling, registrations and associated transactions. In addition, security provisions that protect against fraud will be identified, as will protocols that regulate the release of vehicle data in compliance with all applicable state and federal laws, including the Driver's Privacy Protection Act. The BMV is working to develop more efficient methods to get Ohio courts to report conviction record data to the BMV through automated electronic system(s) in a more timely and accurate manner.

Quick Stats for the Vehicle System			
	FFY 2018	**FFY 2019**	**FFY 2020**
Vehicle Registrations Issued	12,232,228	12,620,662	11,510,195
Vehicle Registrations Processed by Mail	1,691,548	2,059,511	2,059,504
Online Transactions Recorded	1,382,622	2,308,093	2,279,655
Titles Issued in Ohio's 88 Counties	5,981,251	5,975,599	5,550,141

System Attribute Status

Attribute Area Status Vehicle Information	
Timeliness	Vehicle registrations issued by Deputy Registrars and internal agencies are updated in the vehicle registration database the next business day. Internal changes made by staff are immediate to the vehicle registration record. Local law enforcement agencies with LEADS can access the vehicle registration database.
Accuracy	Vehicle registrations issued by Deputy Registrars and internal agencies have internal validation checks that ensure accuracy of the data elements submitted to the vehicle registration database.
Completeness	Vehicle registrations issued by Deputy Registrars and internal agencies contribute to the vehicle registration database. The VR re-write is underway to improve the completeness of the vehicle registration database.
Uniformity	All rules and validations are not uniform at this time between the vehicle registration database and the Business Application Services System (BASS) (feeder system).
Integration	Integration is limited at this time. The vehicle registration database will be integrated with the driver license database and real-time updates will occur with the Business Application Services System (BASS) which will translate to giving law enforcement agencies real-time information to review or research.
Accessibility	The vehicle registration database is used by internal staff and accessible by law enforcement agencies through LEADS.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Examine opportunities to transition certain forms to an electronic format in order to increase accuracy and timeliness of vehicle and driver records.

FFY 2023 – FFY 2024 Goals and Objectives (Tier Two)

1. Complete the rewrite the Ohio BMV Business Application Services System (BASS), which is based on a .NET architecture to enhance User Interface (UI) and align with rules established in the new vehicle registration database. Currently 10% of the functionality is complete.
2. Complete the addition of a 2D barcode to the vehicle registration which will allow for rapid, accurate collection of vehicle information at the time of printing and mailing as well as by law enforcement officers in the field using barcode readers or scanners.
   Design a universal template for all renewal notice applications for ease of automation

FFY 2025 Goals and Objectives (Tier Three)

1. None identified at this time.

Performance Measures

Vehicle Performance Measures 3-Year Analysis			
Measure	**FFY 2019**	**FFY 2020**	**FFY 2021**
Complete the rewrite of the vehicle registration database.	Baseline – completion in process	Completed	Enhancements and fixes completed
Complete data linkages between the vehicle registration database and the driver license database which will allow for real-time updates with the Business Application Services System (BASS) which can be used by law enforcement agencies.	N/A	N/A	Completed

TRCC Funded Projects

The Ohio TRCC is not currently funding any projects for the Vehicle information system.

General Funding Information

Ohio's Vehicle information system is funded through a mix of federal grants and state operating funds. The Ohio TRCC provides special project funding upon request.

FFY 2021 Accomplishments

- Update to Online DL/ID duplicate; US addresses only
- Move Temp Tag POD to Deputies from Dealers
- New Ohio License Plate (target release date 12/29/2021)
- Driver License ID Card Reprint Online implemented 10/03/2021
- BMV Express Self-Service Kiosks for Renewing Vehicle Registrations 10/13/2021

Traffic Safety Information System Coordinator

Gregory Edwards, Ohio Bureau of Motor Vehicles, Ohio Department of Public Safety

Driver

Description

Ohio's driver data system includes several databases to collect, update, and record licensed driver information and is maintained by ODPS IT staff. In the State of Ohio, the main driver data system is the Driver License System, which stores driver information and history. This system is already linked to the Problem Driver Pointer System (PDPS), the Commercial Driver License Information System (CDLIS), the Social Security Online Verification System (SSOLV), and Systematic Alien Verification for Entitlements Program (SAVE). In addition, the Ohio BMV will be connecting to the American Association of Motor Vehicle Administrators (AAMVA) State-to-State (S2S) Verification Service prior to October 2020.

Staff at Deputy Registrar License Agencies, and Driver Exam Stations use the BMV Business Application Services System (BASS) program to collect driver information and to issue or reinstate driver licenses. The BASS system is linked with the driver license system, allowing users to update information or review a driver's history. The Ohio BMV BASS program has automated edit checks and validation rule logic programmed into the business rules that ensure entered data falls within the range of acceptable values and is logically consistent between other fields. Edit checks are applied when data is added or edited in records. BASS program coding and relationship to the driver license database provides quality control measurements that are partially compliant with ANSI D-20 elements.

An area for further improvement is the development and implementation of a comprehensive driver data system quality assurance management program. As part of this program, a process will be developed to purge data from the driver license system. New policies, procedures, workflow diagrams, and other metrics for measuring data flow and time processes will also be established.

A complete rewrite of the existing Driver License System (and its subsystems) from COBOL/PacBase into C# has been underway since February 2017. The new system named "Genesis" is scheduled to launch in May 2019. This new technology integrated into the Genesis system is structured with the future in mind. System components are grouped by tier and logical function to ensure maintainability.

The BMV is currently working on several projects which will enhance the Driver information systems. These projects are not leveraging 405(c) funds, but rather internal state funding sources.

Genesis (Driver License System Rewrite)

The DL System was scheduled to move to the new platform by March 2019. This has been delayed. Testing is continuing for the Genesis release. System releases will be done in deployment phases as testing is approved by the business units. The anticipated "Go Live" date is tentatively set for late May 2019.

Reinstatement Fee Amnesty Initiative (Effective 01/31/19)

Requires the BMV to establish a six-month driver's license reinstatement fee reduction and amnesty program. Programming requirements have been completed.

Image Repository and Indexing System (IRIS)

In 2019, this new imaging system will replace the Custom Processing Indexing Client (CPIC) that Vehicle Information Services (VIS) and the Office Driver Services (ODS) currently uses to process and view a variety of documents.

The Ohio BMV will work to successfully develop and deploy a redesigned modernized driver license information system that utilizes web-based programming language to replace a mainframe-based legacy system. Enterprise architecture analysis provides a unified environment enabling standardized hardware and software to be shared across the organization providing linkage of multiple systems throughout the host environment. The redesign has provided an opportunity to cleanse data, automate processes through Ohio courts for electronic conviction entries with secure and error elimination logic to reduce intervention by BMV staff performing daily tasks. The system was designed by staff who actually perform transactions and do the work.

Quick Stats for the Drivers System			
	FFY 2018	FFY 2019	FFY 2020
Total licensed Ohio drivers	7,944,315	8,071,426	8,528,154
Driver licenses issued	2,579,327	2,474,050	2,213,811
BMV and court suspensions	522,776	415,318	334,305
Identification cards issued	448,032	429,264	320,477

System Attribute Status

Attribute Area Status Driver Information	
Timeliness	Improved API provides Ohio courts the ability to enter convictions online in a secure and timely manner with error checking logic programmed into the acceptance criteria.
Accuracy	Conviction error checking logic at the point of entry will eliminate most human data entry mistakes and minimize Ohio BMV staff intervention to perform manual corrections to court conviction data entered onto driving records.
Completeness	Timely and accurate recording of court convictions entries will expedite the updating of driving records and reduce error rates to expedite and authenticate one-time completion of record updates in the driver license system.
Uniformity	The driver license system, vehicle registration system, Business Application Services System (BASS), and Image Retrieval and Indexing System (IRIS) will be linked together in a unified enterprise environment.
Integration	Connecting the driver license and vehicle registration databases together will provide real-time reporting capabilities that have been absent in the past. Law enforcement and courts will benefit from the integration of these two primary BMV-related systems.
Accessibility	Law enforcement, courts, and other states will be provided an opportunity to access current real-time driver license and vehicle registration data from Ohio with the advent of the Genesis computer system.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Complete State-to-State driver license connectivity (one license for one individual).
2. Continue efforts to comply with all FMCSA standards for CDL holders.
3. Examine opportunities to transition certain forms to an electronic format (e.g. Administrative License Suspension – form 2255) in order to increase accuracy and timeliness of certain records.

FFY 2023 – FFY 2024 Goals and Objectives (Tier Two)

1. Research and evaluation of emerging technologies with regard to digital driver licenses.
2. Rewrite of BASS delivery system (same as the Tier Two goal under the Vehicle information system).
3. Offer online driver license renewals for eligible customers and eight-year renewal options online and in-person.

FFY 2025 Goals and Objectives (Tier Three)

1. Continue to explore security and technological advances in driver license communities nationally for improvements in the way in which Ohio delivers these services to our citizens.
2. Expand driving skills testing to third party certified driving schools.

Performance Measures

Driver Performance Measures 3-Year Analysis			
Measure	**FFY 2019**	**FFY 2020**	**FFY 2021**
Complete data linkages between the driver license system, vehicle registration system, Business Application Services System (BASS), and Image Retrieval and Indexing System (IRIS); resulting in a unified enterprise environment.	Baseline – completion in process		
Increase the number of convictions collected from courts via online interfaces.	Baseline – completion in process		

TRCC Funded Projects

The Ohio TRCC is not currently funding any projects for the Driver information system.

Other Projects

- Update to Online DL/ID duplicate; US addresses only
- Move Temp Tag POD to Deputies from Dealers
- Know to Drive (DX knowledge testing upgrade/replacement
- Commercial Trailer and Semitrailer Registration - Beginning January 1, 2022, requires the owner or lessee of a trailer or semitrailer that is registering it for the first time in Ohio to pay a one-time $50 registration tax.
- New Ohio License Plate (target release date 12/29/2021)
- Commercial Driver Entry Level Driver Training (ELDT) - FMCSA new driving CDL training rule; 2/7/2022
- Online DL/ID Renewal – effective 07/01/2022
- New BMV Online Services (BMVOS) Application going live in March 2022
- Knowledge to Drive Online – Pilot to begin spring 2022
- Road Scholar – driver skills testing using tablet computers pilot to begin May 2022
- Third Party Driver Testing to begin piloting July 2022
- Business Application Services System (BASS) program rewrite to begin August 2022

General Funding Information

Ohio's Driver information system is funded through a mix of federal grants and state operating funds. The Ohio TRCC provides special project funding upon request.

FFY 2020 Accomplishments

- Deputy Registrar and Driver Examination Business Operations
  Due to COVID-19 health concerns and within provisions outlined in Ohio House Bill 197, all deputy registrar license agencies and driver license examination stations were temporarily closed effective March 19, 2020. As a result, driver license, identification card, and vehicle registration expiration dates were extended.

  Deputy registrar businesses reopened on May 26 and driver exam stations resumed business on June 9 with new public health and safety protocols in place to curtail the spread of COVID-19 when obtaining these services.

  Restoration of these public services required substantial planning and resources to coordinate and prepare for personal protective equipment to be purchased and installed in addition to

devising a different method for administering driving tests to protect the safety of the driver examiners and individuals taking driving tests. The solution for resumption of driving tests was to design a modified testing road course with driving examiners scoring the tests from outside the vehicles while customers executed the commands from behind the wheel.

Through all of the challenges presented due to the business model changes, the deputy registrars and driver examiners performed their services with exemplary performance.

- State-to-State (S2S)
  The State-to-State project planning began in early 2020 and will allow Ohio to reach out to other participating states to obtain customer information on out-of-state license conversions to and from Ohio. Progress continues however, due to the COVID19 emergency declaration in Ohio, this project target date has been moved to April 2021.

- Reinstatement Fee Debt Reduction and Amnesty Program
  The Ohio Bureau of Motor Vehicles is implementing a driver's license reinstatement fee debt reduction and amnesty program for offenders whose driver's licenses have been suspended for specific violations. The program will have two phases and only applies to a driver's license or permit suspension; it does not apply to a commercial driver's license or permit suspension.
  Under this permanent program drivers will not need to submit an application to receive reduction or waiver of reinstatement fees. The one-time reduction will automatically be applied to any driver record when one or more offenses become eligible. The BMV will notify eligible individuals by mail of the reduction and request current proof of insurance in order to activate the reduction. Drivers who can also provide proof of indigence will be eligible for the complete amnesty waiver.

  If a driver is enrolled in the amnesty program and has remaining eligible or ineligible reinstatement fees they will be placed on an amnesty fee payment plan requiring a payment of at least $25 every 30 days.

- Jabber Accounts
  All BMV staff had Jabber installed on their laptops by the end of calendar year 2020 in order to make/receive calls while teleworking. In addition, printer access was installed on all their laptops. This allows the staff while at home to queue letters to the printer at Shipley. Various management and customer service assistants come into the office once a week to print and mail the queued letters.

Traffic Safety Information System Coordinator

Gregory Edwards, Ohio Bureau of Motor Vehicles, Ohio Department of Public Safety

Roadway

Description

Ohio has made substantial progress over the last several years in improving its roadway data and continues to move forward with building an enterprise roadway data system. The Ohio Geographically Referenced Information Program (OGRIP) is a governor-appointed council whose goal is to encourage the creation of digital geographic data and to foster the use and access of this data. OGRIP supports several initiatives aimed at improving Ohio's roadway data. One such initiative, the Location Based Response System (LBRS) initiative, establishes a partnership between state and county governments for the creation of accurate locational information on all roads and addresses in a county. Information collected through LBRS is used to save lives by improving accuracy of location information provided to first responders and to save taxpayer dollars by reducing redundant data collection activities.

Through the LBRS initiative, the State of Ohio is moving forward on FHWA's requirement to collect Model Inventory of Roadway Elements (MIRE) fundamental data elements on all public roads by 2026. To date, all 88 Ohio counties are participating in the LBRS program. The expected completion date for the LBRS project in December 2023.

Funding to assist counties in developing their local data system has been provided by TRCC in the past. In the future, TRCC will support further integration of the roadway data system with other data systems.

ODOT and DPS collaborated to create Officer Crash Mapping Tool (OCMT) within the 2019 crash reporting system. This tool has been installed on computers in patrol vehicles and will automatically populate 17 location-related primary fields on the OH-1.

ODOT has begun setting performance measures for the roadway data system. With the new roadway inventory management system, performance measures related to completeness, uniformity and accessibility were established. Additional performance measures related to timeliness and accuracy are being established with the project implementation team. ODOT created Data Governance committee and a chief data officer that will ensure information is accessible and used consistently throughout ODOT and among ODOT partners.

System Attribute Status

Attribute Area Status Roadway Information	
Timeliness	Our roadway file is officially published once a year based on all the improvements and edits completed in the previous year. Lack of information or delay submittals by local governments can negatively impact the timeliness of incorporating roadway improvements into the state data systems.
Accuracy	There are several attributes that are considered highly accurate such as functional class and jurisdictional boundaries. Performance measures for

	accuracy have been developed and more a planned to be integrated into the daily business process and documented in the Roadway Information Manual.
Completeness	For roadway segments and ramps, road inventory meets the MAP-21 Fundamental Data Elements. Completeness is not as much of a challenge as accuracy is for keeping improvements current.
Uniformity	The road inventory system has codes and definitions that ensure uniformity of data. The updated Roadway Information Manual will improve uniformity by better documenting data collection processes.
Integration	Several system level processes and staff hours are used to ensure integration of crash data and the road inventory system.
Accessibility	ODOT's published road inventory file is made publicly available through our Transportation Information Mapping System (TIMS) as well as a few vital attributes provided weekly to DPS to use and make publicly available.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Collect and integrate LBRS data for all 88 counties into the road inventory.
2. Maintain a 95% accuracy rate for mapping crashes to the roadway network (linear referencing system).
3. Increase by 10% the number of permanent counters on the public roadway network.
4. Begin collecting volume data related to vulnerable users.
5. Finish collecting fundamental data elements for all intersections through MIRE.

FFY 2023 – FFY 2025 Goals and Objectives (Tier Two)

1. Meet the MAP-21 requirement for linking crash data to injury outcome data.
2. Update the guidelines associated with enhancing short term counts to collect all modes.
3. Develop tools to collect attribute data for new roadways.
4. Develop processes to improve timeliness of data collection and integration.
5. Implement a data catalog and quality software application.
6. Distribute real time travel data to inform motorists of driving conditions through mobile or vehicle applications.
7. Develop a work zone PowerBI dashboard to track, investigate and respond to crash patterns.

FFY 2026 Goals and Objectives (Tier Three)

1. Utilize advanced technologies to collect inventory data.

Performance Measures

Roadway Performance Measures 3-Year Analysis			
Measure	**CY2019**	**CY2020**	**CY2021**
Number of counties Location Based Response System (LBRS) data integrated into road inventory.	40 (+1)	48 (+8)	63 (+15)
Maintain a 95% accuracy rate for mapping crashes to the roadway network (linear referencing system).	95%	97%	97%
Maintain the number of annual logins to DOT crash data system (30,000+)	20,560	36,616	32,313
Collect MIRE-FDE data for 260,000 intersections by 2023.	-	30,000	255,000 (+225,000)

TRCC Funded Projects

StreetLight & STRAVA Bicycle/Pedestrian Data

On May 16, 2017, the Ohio TRCC approved $86,490 for the purchase of a specialize data set related to bicycle/pedestrian geocoded activities in the state. Pedestrian fatalities make up 13% of the total roadway fatalities in Ohio and have been increasing at an alarming rate. Between 2014 and 2015, Ohio experienced a 27.6% increase in pedestrian fatalities. Similarly, between 2015 and 2016, an 18.3% increase occurred. Total pedestrian crashes have also been increasing by approximately 5% over the past three years.

ODOT and its regional partners are investigating ways to better understand these trends. Traditionally, engineers look at vehicle miles traveled to better understand increase in use. As more people use the facilities, we expect to have additional risk or crashes.

ODOT has transitioned to using StreetLight data, which incorporates Strava data, to determine bike and ped activity measures. StreetLight will provide volume data for both on street and off street facilitates. This data will be used by engineers and planners to understand volumes and trips completed for

pedestrians and bicycles. This can also be used to understand the critical link between pedestrian volumes and crashes.

MIRE Intersection Data Collection
ODOT has worked to develop data collection requirements for accuracy and completeness following the MIRE 2.0 Data requirements focusing on the Fundamental Data Elements. The goal of MIRE is to provide a model for a comprehensive roadway and traffic data inventory that can be mapped and used by states to conduct safety analysis and make data-driven safety investments. This project has collected 225,000 intersections statewide and is expected to be complete in July 2022.

Location Based Response System
ODOT's Location Based Response System (LBRS) establishes partnerships between State and County government for the creation of spatially accurate street centerlines with address ranges and field verified site-specific address locations. ODOT has been working with the Ohio Geographically Referenced Information Program (OGRIP) to develop a comprehensive, statewide Geographic Information System (GIS). The resulting LBRS will include highly accurate field verified data that is current, complete, consistent and accessible.

ODOT collected an integrated 15 counties of data into the road inventory in CY2021 bringing the total up to up to 63 counties. The remaining 25 counties will be updated over the next 2 years.

General Funding Information

Ohio's Roadway information system is funded through a mix of state agency funds and Roadway SPR funding. The Ohio TRCC provides special project funding upon request.

FFY 2021 Accomplishments

MIRE INTERSECTION DATA COLLECTION
ODOT has worked to develop data collection requirements for accuracy and completeness following the MIRE 2.0 Data requirements focusing on the Fundamental Data Elements. The goal of MIRE is to provide a model for a comprehensive roadway and traffic data inventory that can be mapped and used by states to conduct safety analysis and make data-driven safety investments. This project has collected 225,000 intersections statewide and is expected to be complete in July 2022.

LBRS
ODOT collected an integrated 15 counties of data into the road inventory in CY2021 bringing the total up to up to 63 counties. The remaining 25 counties will be updated over the next 2 years.

LOCAL TRAFFIC COUNTS
ODOT identified routes that were missing traffic volumes, but there were historical crashes located on the roadway. These locations were added to the State Fiscal Year 2021 to obtain traffic counts.

Additionally, ODOT worked to update the process for random sampling of local roadways to improve crash predictions or routes with higher observed crashes.

Traffic Safety Information System Coordinators

Brenton Bogard, Office of Transportation and Economic Development, Ohio Department of Transportation

Citation/Adjudication

Description

Electronic citations ("eCitations") are relatively new for the State of Ohio; however, their use has progressed rapidly over the past three years. As of February 2022, 159 courts are either actively receiving or are in the final stages of testing to receive electronically filed citations. Establishing a local rule for the courts is the first step in the furtherance of the eCitation project. Nearly all municipal and county courts have enacted this rule. Juvenile and Mayor's courts are enacting the rule on a case-by-case basis.

ODPS has designed the Ohio Law Enforcement Information System (OLEIS) to assist local law enforcement agencies with transitioning from hand written citations and crash reports. Several third party vendors also offer electronic citation services, three of which are able to submit citation data to the statewide citation database.

In addition to advocating for greater acceptance by Ohio courts, the Ohio TRCC is facilitating a project to provide law enforcement agencies with in-car printers to help with the one-time cost of transitioning to electronically issued citations. To date, 547 law enforcement agencies have agreed to transition to electronic citation as part of this equipment grant program or are already participating in the program. The TRCC distributed more than 2,700 printers as of December 2018. A second phase was distributed during FFY 2020.

Additional work is needed to improve access to citation data. Although the foundations of an eCitation data dictionary exist, the document requires further development. Review of applicable federal guidelines related to the citation data system is also needed.

In FFY 2019, OLEIS was upgraded to allow for driver and vehicle information to be accessed and attached to the citation. This data is obtained directly from the BMV but is updated as information is received from the courts. Courts may report this information via a variety of ways and is often delayed. Ways to improve this data collection are being examined.

Ohio courts are not unified into a single system, and there are currently no linkages between the different citation and adjudication systems in the state. Access to adjudication data is further complicated by technological limitations. Many courts in Ohio do not have a website. Some courts may have a website, but the site is very simplistic and not designed to provide adjudication data. The Ohio Supreme Court maintains the Ohio Courts Networks and most courts across the state are submitting at least some adjudication information to the network. However, the system has a limited number of mandatory data points and is restricted to outside users. The Ohio TRCC is currently working with the Ohio Supreme Court to examine whether this data can be successfully integrated with citation information housed at ODPS.

System Attribute Status

Attribute Area Status Citation/Adjudication Safety Information	
Timeliness	The Ohio State Highway Patrol is the primary contributor to the database at this time. As citations are issued, the data is transferred immediately to the database, making it available for analysis by internal research staff at ODPS. Local law enforcement agencies who utilize OLEIS or an approved third party system are beginning to submit real-time citation data to the statewide repository.
Accuracy	Citations generated by electronic systems have internal validation checks that ensure accuracy of the data elements submitted to the statewide repository.
Completeness	Citations generated by the Ohio State Highway Patrol are the primary contributor to the database at this time. Projects are underway to improve the completeness of the statewide database. Approximately one-quarter of the state's local law enforcement agencies have agreed to submit data to the repository once they have fully implemented eCitation.
Uniformity	The Ohio Supreme Court prescribes the Model Uniform Traffic Ticket (MUTT) and amends it on an as needed basis. The electronic version of the MUTT must substantially mirror all required data fields. All agencies in the state are required to use the MUTT, thus ensuring uniformity of the data.
Integration	Integration efforts are limited at this time. The Ohio Law Enforcement Information System (a system provided by ODPS to local law enforcement agencies) does import information from the BMV (driver and vehicle) into the citation. Outbound integration from the statewide citation repository are not available at this time.
Accessibility	The statewide citation database is used by internal researchers at ODPS. Public facing access is not available at this time.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Increase the number of law enforcement agencies participating in electronic citation by 10%.
2. Continue to complete interface projects with the courts (case management systems for eFiling) and third party eCitation vendors.

FFY 2023 – FFY 2024 Goals and Objectives (Tier Two)

1. Construct a secure FTP location so that citation data can be shared with traffic safety data partners to improve accessibility.
2. Improve timeliness of certain adjudication records to the BMV driver's history database.
3. Work with the Ohio Supreme Court's Technology Committee for a uniform traffic citation data dictionary.

FFY 2025 Goals and Objectives (Tier Three)

1. Achieve 90% participation in receiving electronically filed eCitations for all municipal, county and juvenile courts across the state and 50% participation for mayor's courts.
2. Explore regional data sharing opportunities.
3. Link adjudication data contained in the Ohio Courts Network with the statewide citation data file.

Performance Measures

Citation/Adjudication Performance Measures 3-Year Analysis			
Measure	**CY 2019**	**CY 2020**	**CY 2021**
Total number of court locations successfully interfaced with OTIS/OLEIS to accept electronically filed citations -Municipal/County -Juvenile -Mayors	124	130	151
Number/Percentage of Municipal/County courts able to accept electronically filed citation via interface (of 163 total)	123 Municipal/County court locations (75.4%)	123 Municipal/County court locations (75.4%)	123 Municipal/County court locations (75.4%)
Number/Percentage of Juvenile courts able to accept electronically filed citation via interface (of 88 total)	14 Juvenile court locations (15.9%)	14 Juvenile court locations (15.9%)	14 Juvenile court locations (15.9%)
Number of local law enforcement agencies submitting citation data to the statewide citation repository (non-OSHP)	129	133	157

Number of records received by the statewide citation repository from local law enforcement (non-OSHP)	101,372	65,688	89,681

TRCC Funded Projects

eCitation Equipment/Software Grants

Prior to 2014, the State of Ohio did not have a central repository for traffic citation data. ODPS began a plan to implement a statewide citation tracking system in order to improve the timeliness, accuracy, and accessibility of citation data. OSHP became the first agency to use the statewide citation system and remains the primary user of the system. Eight additional non-OSHP agencies were selected to participate in a pilot project of the statewide eCitation system. As part of the pilot, agencies were given access to the OLEIS software, which includes an electronic citation module, and in-car eCitation printers.

After an officer submits an eCitation, data can be uploaded to ODPS and to local court systems. ODPS IT staff has the capability of tracking the number of electronic citation submissions by participating agency. The use of software does allow for the implementation of validation processes, thereby increasing the accuracy of the data. However, reports tracking common errors are not available at this time. Additional work is also needed to improve access to citation data. Although the foundations to an eCitation data dictionary exist, the document requires further development. Establishing these processes is the first step in further integrating citation data into existing traffic records systems.

The purpose of the eCitation project is to further support the submission of electronic citations and the growth of a statewide citation system. Since the end of the pilot study, TRCC has been working to bring additional law enforcement agencies into the eCitation program. TRCC is providing grant funded in-car eCitation printers, magnetic stripe card readers and mounting brackets to interested law enforcement agencies. OLEIS is also provided at no cost and ODPS ITO provides limited technical support upon request. Staff are also made available if an agency requests an on-site demonstration of the software. A final round of equipment grants began in FFY 2019.

System Interfaces

On March 14, 2017, The Traffic Records Coordinating Committee (TRCC) approved $500,000 in additional funding for the construction of various interfaces related to eCitation. These interfaces would link existing data systems at the local level so that these systems will be able to communicate with data systems owned by ODPS. Funding supported the following:

- Interfaces between eCitation systems (either OLEIS or privately owned) and courts and the Department of Public Safety,

- Interfaces between privately owned eCitation systems and law enforcement records management systems, and
- Special data information systems projects (e.g. Hamilton County Municipal Court).

Interfaces are being built by a number of third party vendors and work is expected to continue over the next several years, with the end goal of 100% coverage throughout the state in terms of electronic filing with the courts and data collection by the ODPS statewide statistical database.

Court Case Management System Upgrades

June 13, 2019, the Ohio Traffic Records Coordinating Committee (TRCC) approved up to $1 million in project funding for courts across the state to upgrade existing case management systems in order to be able to accept electronically filed traffic citations.

Currently, more than 100 municipal and county courts are interfaced with the Ohio Trooper Information System (OTIS) or the Ohio Law Enforcement Information System (OLEIS) to accept electronically filed traffic citations. This represents approximately 66% of all municipal and county courts in the state of Ohio. Many of the remaining courts are unable to participate in the program due to antiquated case management systems. In Ohio, courts are free to select their own case management systems. Many of these existing systems require significant upgrades in order to allow for electronic citation filings. Cost of these upgrades is outside of the ability of many of these courts.

Without these upgrades, the Citation/Adjudication data system will suffer from timeliness and accuracy as citations will still need to be hand entered into the courts' case management systems, opening the process to human error.

General Funding Information

The citation and adjudication traffic safety information system is partially funded by special project funding through the TRCC. Ongoing system costs associated with the citation database are paid for by ODPS (i.e. administrative support and software upgrades). Local courts often leverage internal funds from fines as well as grants from the Ohio Supreme Court to pay for infrastructure and software upgrades for their case management systems. Some courts are assisting their local law enforcement partners by covering costs related to updating mobile computer terminals and the costs of thermal paper.

FFY 2021 Accomplishments

During FFY 2021 ten additional courts were interfaced through the Court Case Management System Upgrades project. In addition, the TRCC in partnership with the Ohio Supreme Court conducted a second round of solicitation and secured an additional thirteen courts that will participate in this project.

Traffic Safety Information System Coordinator

Gretchen Lopez-Martinez, Ohio State Highway Patrol, Ohio Department of Public Safety

EMS/Injury Surveillance

Description

Ohio's Injury Surveillance System (ISS) includes the EMS Incident Reporting System (EMSIRS) out-of-hospital data system; the Ohio Trauma Registry (OTR), which includes both acute care and rehabilitation modules. These systems regularly track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the state. All components of the ISS have formal dictionaries and data governance documents. Ohio does not currently have an emergency department database.

Each system was developed in accordance with national standards. EMSIRS is based on the National EMS Information System (NEMSIS) standard; OTR acute care module is based on the National Trauma Data Standard; OTR rehabilitation module is based on the Inpatient Rehabilitation Facility Patient Assessment Instrument.

All components of the ISS serve as the source for data analysis on crash victim medical care and are used to identify problems and allocate resources. Integration of EMSIRS with both modules of OTR is currently under development for rollout post EMSIRS rewrite and data repository implementation. As part of the EMSIRS internal rewrite, a copy of trauma data collected by the external vendor will be regularly updated in a newly created data warehouse (ie data repository). The goal of this data warehouse is to co-locate both trauma and EMS data to facilitate record linkage between the two sources for continuity of care research.

Vital records data is available to outside parties for analytic purposes via the Ohio Department of Health's data warehouse, accessible via the internet. Users can generate tabulated reports based on vital statistics data in the warehouse. At present, there are no performance measures, state-level quality checks, or audits of these data sources. Previously prepared annual reports to the TRCC are available on request.

System Attribute Status

Attribute Area Status EMS/Injury Surveillance Information	
Timeliness	Records submitted into EMSIRS are received electronically. The majority of these records are initially submitted within 90 days of the incident. Trauma registry records are also received electronically either from individual facilities or submitted by regional trauma systems representing multiple facilities. Previously, these records were received within 90 days of the patient's discharge date. However recent changes in the software vendor landscape has resulted in reporting delays to the Trauma Registry that are no fault of the facility.
Accuracy	Records entered into EMSIRS and the Ohio Trauma Registry are subjected to validation checks to ensure accuracy.

Completeness	With the completion of the EMSIRS rewrite project, next steps will include projects to improve completeness in both EMSIRS and OTR.
Uniformity	Currently the OTR relies on the various regional groups that submit to the Trauma Registry to provide a level of QA and uniformity to the data. Recently these regions have agreed to consolidate their different regional data dictionary down to a single regional dictionary that supplements the State's data dictionary to further enhance statewide uniformity.
Integration	With the changes in Ohio Law, specifically those from S.B.229 of the 132nd General Assembly signed 2018 and effective March 22, 2019 the new language now permits enhanced data sharing when certain additional guidelines are met. The division developed the necessary processing mechanisms and received provisional approval to begin sending EMS data from EMSIRS to NEMSIS on October 8, 2020. Full approval was received soon after on March 23, 2021.
Accessibility	At the current time, EMSIRS and OTR data are only available to internal researchers. Requests for information are routinely fulfilled in compliance within the constraints of law and rule.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Increase by 5% the number of EMS agencies reporting to EMSIRS.
2. Increase by 3-5% the number of hospitals reporting to the OTR.

FFY 2023 – FFY 2024 Goals and Objectives (Tier Two)

1. Update EMIRS from NEMSIS version 3.4 to 3.5 data schema.
2. Data Integration-Explore sharing and data-linkage opportunities between EMSIRS, Trauma Registry, CODES and FARS.
3. Develop a series of regular reports to the TRCC based on targeted topics and areas of interest.
4. Implement automatic reporting of all Ohio cardiac arrest events directly to CARES national database.

FFY 2025 Goals and Objectives (Tier Three)

1. Partner with Biospatial for enhanced analytics capabilities. Biospatial is a secure cloud based analytics platform that performs near real-time analytics against related health and safety data sources including the National EMS Information System (NEMSIS).
2. Achieve reporting compliance of 95% (or more) across all modules of EMSIRS and OTR.
3. Complete linkage with EMSIRS and national CARES (Cardiac Arrest Registry to Enhance Survival) in order to facilitate simultaneous and effortless reporting all Ohio cardiac arrest data to EMSIRS and the national cardiac arrest database.

Performance Measures

EMS/Injury Surveillance Performance Measures 3-Year Analysis			
Measure	**FFY 2020**	**FFY 2021**	**FFY 2022**
Develop standards for EMSIRS and OTR timeliness, accuracy, completeness and accessibility.	Migration of all vendors & agencies to the new platform was completed and services with the previous vendor were ended as scheduled June 30, 2020. New agencies were also added during this period. There are 860 transporting agencies reporting.	Implemented EMSIRS data sharing with the National EMS Information System (NEMSIS).	There are 865 transporting agencies reporting.
Ensure records in EMSIRS and both modules of OTR are linked through the continuity of care server (full integration).	This has been moved to FFY 2022-2024 timeline as new release of NEMSIS v3.5 data scheme incorporates UUID that links data between the two data sources natively.	This has been moved to FFY 2022-2024 timeline as new release of NEMSIS v3.5 data scheme incorporates UUID that links data between the two data sources natively.	This has been moved to FFY 2022-2024 timeline as new release of NEMSIS v3.5 data scheme incorporates UUID that links data between the two data sources natively.
Number of EMS agencies reporting to EMSIRS.	Reporting compliance is currently 84.5%	Reporting compliance is currently 85%	Reporting compliance is currently 85.7%
Number of hospitals reporting to the OTR.	Due to Covid-19 Pandemic Submission Deadlines were Extended. (Facilities reporting 197)	Recent mergers of the major trauma software vendors into a single company caused delays multiple software updates being made available to facilities by the vendor, delaying reporting. (Data due 2/28/2022)	Reporting extensions continue to be granted in response to Covid-19 and vendor software complications. (Data due 12/31/2022)

TRCC Funded Projects

ODPS-EMS currently oversees two projects related to the EMS/Injury Surveillance system.

Electronic Data Reporting Project

On July 18, 2017, Ohio TRCC approved up to $700,000 in project funding for the purpose of purchasing tablet devices and cases for ODPS/EMS. Local EMS agencies currently report their EMSIRS data in one of three ways: 1) paper submission, 2) electronic submission and 3) third party submission. Providing EMS agencies with the ability to submit run detail electronically will assure greater data acceptability, as well as a more complete and timely view of traffic and trauma related injury surveillance. As is the case with most local departments and governmental agencies, funding is limited and purchasing devices to assist with electronic reporting is often out of reach. The Ohio TRCC is interested in promoting the use of electronic reporting for the EMSIRS and the Trauma Registry. There are approximately 1,400 EMS agencies operating in the State of Ohio. Additionally, it is estimated that there are 1,900 transport vehicles in operation. 1,010 tablet devices were purchased in FFY 2018. Distribution was completed by the end of FFY 2019.

EMSIRS Data Migration

On May 15, 2018, Ohio TRCC approved up to $450,000 in project funding for the purpose of funding a data migration and program rewrite project related to the EMSIRS which is administrated by ODPS/EMS. The funding supported purchasing personal services for two consultant developers for at least one year as well as the cost related to data migration services. The project was focused on both migrating Ohio EMSIRS data back to ODPS and rewriting EMSIRS so that ODPS IT and ODPS-EMS personnel can better manage the system. Work began in October of FFY 2019. The project was completed and services were terminated with the vendor previously providing services as planned June of 2020.

Future Projects in Consideration

ODPS-EMS has several projects in the planning phase. These projects may or may not leverage TRCC funding. Those include the following:

1. Support sending a member of the EMS Data team to the NASEMSO Annual Conference.
2. Support sending a member of the EMS Data team to the ATSIP Annual Conference.
3. Purchase of tablets for distribution to the Medical Transportation Licensing Services section of EMS to facilitate collection of service review and inspection data.
4. Create an android/IOS application for reporting data directly to EMSIRS.
5. Develop a formal Quality Assurance (QA) process for all data submission mechanism types and data repositories.

General Funding Information

Ohio's ISS is funded through a mix of federal grants, state operating funds, and private funds (e.g. hospital data systems). The Ohio TRCC provides special project funding upon request (see above). Improvements to the rehabilitation module will be funded using NHTSA grants administered through TRCC.

FFY 2021 Accomplishments

The EMS/Injury Surveillance system milestones for during FFY 2021 included.

1. Implemented data sharing with national EMS data repository NEMSIS.

    a. EMSIRS passed initial compliance testing and was awarded provisional NEMSIS approval October 8, 2021 to begin sending data to the national repository.
    b. Final system approval was granted March 23, 2021.
    c. Completed a retroactive posting of data to NEMSIS for 2020.
2. Released the 2019 Trauma Registry Annual Report on December 16, 2020.
3. Released the 2021 Trauma Registry system data dictionary with adopted additions and modifications issued by the American College of Surgeons (ACS).

Traffic Safety Information System Coordinator

Eric Mays, Chief, Research & Analysis Section, Ohio Emergency Medical Services, Ohio Department of Public Safety

Data Use and Integration

Description

Program managers have access to multiple sources of traffic data throughout the state. The full extract for much of this data can be found online, with the exception of citation, adjudication, and injury surveillance data are not available in this manner. The Ohio TRCC does not promote data governance or security policies for data integration at this time. This is a function handled by the agency housing the data or process. However, the committee is attempting to help facilitate greater data sharing across the state.

Currently, crash data is not sufficiently linked to driver, vehicle, or other traffic records systems. Crash data is linked to roadway data in order to determine highway rankings for potential safety improvements. Linking injury surveillance data to crash data is a future focus of TRCC.

TRCC recognizes several major deficiencies within the area of data use and integration. Addressing these deficiencies will take time and resources that are not currently in place. Developing plans to address these issues will be a primary focus of the committee over the next several years.

Goals and Objectives

FFY 2022 Goals and Objectives (Tier One)

1. Convene a working group dedicated to developing methods for data governance and security policies for data integration.
2. Increase data sharing agreements with researchers and leverage outside traffic safety data.

FFY 2022 – FFY 2024 Goals and Objectives (Tier Two)

1. Develop a pilot study for linking certain court adjudication records to the statewide citation repository.

FFY 2025 Goals and Objectives (Tier Three)

1. Link citation, crash, vehicle and driver data sets so that data can be more efficiently analyzed for enforcement decisions and traffic safety mitigation.
2. Complete the remainder of the Traffic Records Inventory

Performance Measures

Data Use and Integration Performance Measures 3-Year Analysis			
Measure	**FFY 2019**	**FFY 2020**	**FFY 2021**
Number of integration	(1) The Officer Crash Mapping Tool was		

projects completed.	completed in 2018 through a partnership between Ohio Department of Public Safety and the Ohio Department of Transportation. (2) Completed the data dictionary for the crash system.		
Number of research projects aided by TRCC support.	(1) MIRE intersection data collection. ODOT has worked to develop data collection requirements for accuracy and completeness following the MIRE 2.0 Data requirements. (2) Local traffic counts ODOT identified routes that were missing traffic volumes, but there were historical crashes located on the roadway. These locations were added to the State Fiscal Year 2020 to obtain traffic counts.	(1) MIRE intersection data collection. ODOT has worked to develop data collection requirements for accuracy and completeness following the MIRE 2.0 Data requirements. (2) Local traffic counts ODOT identified routes that were missing traffic volumes, but there were historical crashes located on the roadway. These locations were added to the State Fiscal Year 2020 to obtain traffic counts.	(1) MIRE intersection data collection. Project is near completion.

TRCC Funded Projects

The TRCC is currently funding the Optical Character Recognition tool. This scanning tool will enable the use of cameras on law enforcement equipment (tablets, phones, laptops) to scan data to populate reports in the Ohio Trooper Information System.

General Funding Information

When applicable, the Ohio TRCC will continue its support of data use and integration projects as they relate to traffic safety research, enforcement and infrastructure improvements and will continue to foster and promote data integration efforts.

FFY 2021 Accomplishments

Staff at ODPS are actively looking for ways to promote data integration and information sharing. ODPS has been actively working with Nationwide Children's Hospital on the CODES project (Crash Outcome Data Evaluation System).

A data integration committee was developed between several core areas and respective information technology staff to identify ways to improve and integrate several data components.

Data Use and Integration Coordinator

Gretchen Lopez-Martinez, Ohio State Highway Patrol, Ohio Department of Public Safety

Appendix A: 2021 Ohio TRCC Charter

State of Ohio
Traffic Records Coordinating Committee
Charter
2022

MISSION

The Traffic Records Coordinating Committee will provide strong coordinated leadership to maximize the efficiency and effectiveness for traffic safety information systems in Ohio, with the ultimate goal of working towards zero fatalities on Ohio's roadways. The Traffic Records Coordinating Committee will support data improvements at all levels of government and strive to minimize duplication, improve uniformity, advance electronic data collection, and facilitate data access and use.

MEMBERSHIP/GOVERNANCE

- This charter is created to establish the Traffic Records Coordinating Committee (hereinafter, "TRCC") for the state of Ohio, within the Ohio Department of Public Safety, as required by 23 C.F.R. §1200.22.
- The TRCC shall be organized as a two-tier entity comprised of both a Technical Council and an Executive Council.
- Administrative support shall be provided by the Ohio Department of Public Safety, through the Ohio Traffic Safety Office (hereinafter, "OTSO").
- The TRCC is a public body, and therefore, must comply with the requirements of Ohio's Open Meetings and Public Records Acts.

Executive Council

- The Director of the Ohio Department of Public Safety shall serve as the Chair of the Executive Council.
- The Executive Council shall meet at least one time a calendar year to renew the TRCC charter, to approve the TRCC membership, to be briefed on the work of the Technical Council, and to provide guidance and direction to the Technical Council.
- The Chair of the Executive Council shall be responsible for appointing the Chair of the Technical Council, who shall be known as the state's TRCC Coordinator.
- The Executive Council shall consist of the director of the following agencies, or a representative designated by the director of that agency.
    - Ohio Department of Public Safety
    - Ohio Department of Transportation
    - Public Utilities Commission of Ohio
    - Supreme Court of Ohio

Technical Council

- The Chair of the Technical Council shall select another member of the Technical Council to serve as a Co-Chair. In the event the Chair is unable to attend a Technical Council meeting, the

Co-Chair Chair shall act as Chair for that meeting.

- The Technical Council shall meet at least four times a calendar year and each represented entity shall have one vote.

- Generally, the Technical Council shall have a multidisciplinary membership that includes owners, operators, collectors, and users of traffic records and public health and injury control data systems, highway safety, highway infrastructure, law enforcement and adjudication officials, and public health, emergency medical services, injury control, driver licensing, and motor carrier agencies and organizations.

- Specifically the Technical Council shall include representatives from the Ohio Department of Transportation, the Supreme Court of Ohio, the Ohio Department of Health, Public Utilities Commission of Ohio, Federal Motor Carriers Safety Administration, Federal Highway Administration, National Traffic Safety Administration, Ohio Association of Regional Councils, Buckeye State Sheriff's Association, Ohio Chiefs of Police Association, Ohio Insurance Institute, County Engineers Association of Ohio, Ohio Clerk of Courts Association, and seven sections of the Ohio Department of Public Safety. Each entity shall have one vote except for those representing federal agencies who shall serve as non-voting members of the council.

FUNCTIONS

The Executive Council

- The purpose of the Executive Council is to provide the mission for the Technical Council and guidance as to how the Technical Council can achieve its goals.

The Technical Council

- The Technical Council shall make decisions as necessary to carry out the mission of the TRCC and comply with the requirements of 23 C.F.R §1200.22 and all applicable state and federal laws.

- The Technical Council shall have authority to review any state highway safety data and traffic record systems and recommend changes to such systems.

- The Technical Council shall consider and coordinate the views of organizations in Ohio that are involved in the collection, administration, and use of highway safety data and traffic records systems, and representatives' views to outside organizations.

- The Technical Council shall have the power to create technical subcommittees to perform work, on a temporary or permanent basis, for the Technical Council. Membership on a subcommittee can include representatives from any Ohio entity that contributes to or makes use of the traffic safety information system. A subcommittee could be created to address issues that are specific to a subset of the membership or to bring together subject matter experts charged with making recommendations to the full Technical Council on an issue that would otherwise occupy too much time to be handled by the full body. Subcommittee chairs shall be appointed by the Chair of the Technical Council.

- The purpose of the Technical Council is to recommend the use of specific statewide resources for the purpose of reducing property, injury, and fatal traffic crashes on Ohio roadways. In furtherance of this purpose, the Technical Council shall do the following:
    - Review and evaluate new technologies to keep the highway safety data and traffic records system current
    - Approve annually any changes to the states traffic records multi-year strategic plan.
    - Approve annually performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility or integration of the core highway safety database.
    - Assist Technical Council members applying for federal funds that will support and improve traffic records.
    - Approve expenditures of section 408 or 405C funds received by the Ohio Department of Public Safety.

As the fully designated representatives of our respective agencies to the Executive Council of the Ohio Traffic Records Coordinating Committee, we the undersigned hereby approve the 2022 Charter for the Traffic Records Coordinating Committee.

Ohio Department of Public Safety
Benjamin Suver, Deputy Director, Director Designee
Date: 12.14.21

Ohio Department of Transportation
Jack Marchbanks, Ph.D., Director
Date: 14 Dec. 2021

Public Utilities Commission of Ohio
John Williams, Deputy Director, Chairman Designee
Date: 12/14/21

Supreme Court of Ohio
Stephanie Hess, Esq. Interim Administrative Director
Date: 12.14.2021

Appendix B: TRCC Membership Roster

Ohio Traffic Records Coordinating Committee Members FFY 2022			
Member	**Position**	**Agency**	**Representing Organization (Core Area)**
EXECUTIVE COUNCIL			
Thomas Stickrath	Director - TRCC Executive Council Chair	Ohio Department of Public Safety	All Core Areas
Jack Marchbanks	Director	Ohio Department of Transportation	All Core Areas
Jennifer A. French	Chairman	The Public Utilities Commission of the State of Ohio	All Core Areas
Stephanie E. Hess, Esq.	Administrative Director	The Supreme Court of Ohio Office of the Administrative Director	All Core Areas
TECHNICAL COUNCIL			
CHAIR AND CO-CHAIR			
Gretchen Lopez-Martinez	Program Administrator 3 - TRCC Co-Chair	Ohio Department of Public Safety - OSP	Department of Public Safety (all core areas)
Ohio Department of Public Safety - Administration			
Keith Church	Information Technology Supervisor 3	Ohio Department of Public Safety - IT	Information Technology, Administration (Crash, Roadway, Driver, Vehicle, Citation, Adjudication, Injury Surveillance/EMS)
Ohio Department of Public Safety - BMV			
Jerome Ferguson	Administrative Officer 1	Ohio Department of Public Safety - BMV	ODPS BMV (Driver and Vehicle)
Tom O. Wilson	Administrator	Ohio Department of Public Safety - BMV	ODPS BMV (Driver and Vehicle)
Gregory Edwards	Administrator, BMV Special Operations	Ohio Department of Public Safety - BMV	ODPS BMV (Driver and Vehicle)
Rob Fragale	BMV Program Administrator	Ohio Department of Public Safety - BMV	ODPS BMV (Driver and Vehicle)
Ohio Department of Public Safety - EMA			
James Dwertman	Disaster Services Administrator	Ohio Department of Public Safety - EMA	ODPS EMA (Driver, Vehicle)
Ohio Department of Public Safety - EMS			
Eric Mays	Chief, Research & Analysis Section	Ohio Department of Public Safety - EMS	ODPS EMS (Injury Surveillance/EMS)

Ohio Department of Public Safety - CJS			
Jim Luebbers	Criminal Justice Planning Supervisor	Ohio Department of Public Safety - CJS	ODPS CJS (Driver, Vehicle)
Ohio Department of Public Safety - Homeland Security			
Janille Stearmer	Program Administrator 3	Ohio Department of Public Safety - OHS	Homeland Security, Administration (Driver, Vehicle)
Ohio Department of Public Safety - State Highway Patrol			
Tom Gwinn	Administrative Officer 2	Ohio Department of Public Safety - OSP	Planning & Analysis, Ohio State Highway Patrol-FARS
Ohio Department of Transportation			
Caraline Griffith	Transportation Engineer 3	Ohio Department of Transportation	Office of Systems Planning & Program Management (Crash, Roadway)
Brenton Bogard	Safety Engineer	Ohio Department of Transportation	Office of Systems Planning & Program Management (Crash, Roadway)
Supreme Court of Ohio			
Milt Nuzum	Director of Judicial Services	Supreme Court of Ohio	Judicial Services (Citation/Adjudication)
Public Utilities Commission of Ohio			
Yvonne Cooper	Data Program Administrator II	Public Utilities Commission of Ohio	Public Utilities Commission of Ohio (Crash, Roadway)
Suzanne Williams	Public Utilities Administrator 2	Public Utilities Commission of Ohio	Public Utilities Commission of Ohio (Crash, Roadway)
Ohio Department of Health			
Sara Morman	Program Administrator	Ohio Department of Health	Violence & Injury Prevention Program (Injury Surveillance/EMS)
Ohio Association of Regional Councils			
Grant Taylor	Planner	Eastgate Regional Council of Governments	Ohio Association of Regional Council (Roadway)
Lauren Cardoni	Senior Planner	Mid-Ohio Regional Planning Commission	Ohio Association of Regional Council (Roadway)
Buckeye Sheriff's Association			
Ryan Furlong	Lieutenant	Logan County Sheriff's Office	Buckeye State Sheriff's Association (Crash/Roadway Driver, Vehicle, Citation/Adjudication)
Ohio Chiefs of Police			

Michael T. Pomesky, CLEE	Chief of Police	Perry Township Police Department	Ohio Association of Chiefs of Police (Crash, Roadway, Driver, Vehicle, Citation/ Adjudication, Injury Surveillance/EMS)
Ohio Insurance Institute			
Dean Fadel	President	Ohio Insurance Institute	Ohio Insurance Institute (Crash, Driver, Vehicle)
County Engineers Association of Ohio			
Michelle Risko	Program Manager	County Engineers Association of Ohio	County Engineers Association of Ohio (Roadway)
Dean Ringle	Executive Director	County Engineers Association of Ohio	County Engineers Association of Ohio (Roadway)
Ohio Clerks of Courts Association			
Lori Tyack	Clerk of Courts	Franklin County Municipal Court	Ohio Association of Municipal/County Court Clerks (Citation & Adjudication)
Federal Motor Carriers Safety Administration (non-voting)			
Stephen McCormick	Division Administrator	Federal Motor Carrier Safety Administration	Federal Motor Carriers Safety Administration(Crash, Roadway, Driver)
Kevin Workman	State Program Manager	Federal Motor Carrier Safety Administration	Federal Motor Carriers Safety Administration (Crash, Roadway, Driver, Vehicle)
Federal Highway Administration (non-voting)			
Ron Garczewski	Safety Engineer	Federal Highway Administration	Federal Highway Administration (Crash, Roadway, Driver)
National Highway Traffic Safety Administration (non-voting)			
Kenneth Ledet	Regional Program Manager	National Highway Traffic Safety Administration	National Highway Traffic Safety Administration - Region 5 (Crash, Roadway, Driver, Vehicle, Citation/Adjudication, Injury Surveillance/EMS)

Appendix C: Ohio TRCC Historical Funding

Total Available 405c Funds as of FFY 2017	
405c (FFY 2017)	$1,211,979.31
405c (FFY 2018)	$1,389,505.18
405c (FFY 2019)	$1,509,308.21
405c (FFY 2020)	$1,465,595.33
405c (FFY 2021)	$1,469,353.27
Total	$7,045,741.30

Appendix D: 2020-2021 Assessment Recommendations

FFY 2023 405C TRA Recommendations

Crash Recommendations

1. Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *The Model Minimum Uniform Crash Criteria (MMUCC) is a primary source for the collection of crash data elements. The ANSI D-16 and ANSI D-20 will be used in the development of the new traffic crash report.*

2. Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *The crash data system does not currently interface with the driver, vehicle, citation, adjudication, or injury surveillance systems. Included in this strategic plan are objectives to begin exploring potential methods to build these interfaces and to improve existing interfaces.*

Vehicle Recommendations

3. Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *BMV is developing annotated vehicle data system documentation. The agency is also identifying the security provisions that protect data against fraud and protocols that regulate the release of vehicle data.*

4. Improve the description and contents of the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response*: BMV is developing annotated vehicle data system documentation. The agency is also identifying the security provisions that protect data against fraud and protocols that regulate the release of vehicle data. Revisions to the vehicle registration database will improve overall data quality. Data auditing is performed on a routine basis by BMV field staff, and trend analysis and random data sampling is performed routinely to review transactions for accuracy and fraud prevention.*

Driver Recommendations

5. Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *Planned revisions to the vehicle registration database will improve overall data quality.*

Roadway Recommendations

6. Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Response: *The TRCC will evaluate and identify improvements in the roadway system in efforts to adherence to national guidelines. Recommendations will be made for improvements to applicable sections.*

7. Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *ODOT is currently developing a new roadway inventory management system. As part of this project, performance measures related to completeness and quality will be established.*

Citation and Adjudication Recommendations

8. Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *TRCC will begin reviewing the citation system's adherence to national guidelines. Recommendations will be made for improvements to applicable sections.*

9. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *Performance measures for improving citation data quality are future goals for TRCC and will be explored as the system develops.*

10. Improve the description and contents of the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *The TRCC will work with local partners to identify, develop and design a comprehensive descriptions for Ohio's Citation and Adjudication system.*

Injury Surveillance Recommendations

11. Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Response: *With the implementation of the new EMSIRS system, those agencies reporting data have access to introductory data dashboards displaying their actual data on various key items as submitted, and the related state aggregate data for comparison. As time and staffing permits over the next several years we plan on promoting the soft-rollout of this new feature as an enticement for improved local EMS engagement and demonstration of the benefits of accurate and timely data collection and submission.*

12. Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Response: *Implementation of the new EMS data system (EMSIRS) is now complete. The primary reason for this move was to allow for direct granular access to the data submitted to the state by local EMS providers. The trauma registry is in the process of being upgraded to a newer platform by the 3rd party vendor. Plans are already being made to upgrade the EMS registry from NEMSIS version 3.4 to 3.5. This will facilitate the eventual linkage of EMS and trauma registry data as NEMSIS version 3.5 incorporates a universal patient ID shared across both systems. Ohio has no plans to develop an emergency department data system.*