GEORGIA

GOVERNOR'S OFFICE OF HIGHWAY SAFETY

FFY 2021 Traffic Records Strategic Plan

Prepared by:

Georgia Governor's Office of Highway Safety

7 Martin Luther King Jr. Dr. SW, Suite 643
Atlanta, GA 30334
Phone: (404) 656-6996 | Fax: (404) 651-9107
www.gahighwaysafety.org

Brian Kemp, Governor
Allen Poole, Director of GOHS
Jimmy Sumner, Deputy Director of GOHS

Eshon Poythress, Operations Manager, Strategic Planning
Courtney Ruiz, Georgia Traffic Records Coordinator

Approved By:
Georgia TRCC Technical Committee, June 10, 2020
Georgia TRCC Executive Committee, July 14, 2020

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Georgia's Traffic Records data is critical to effective safety programming, operational management, and strategic planning. In cooperation with local, regional, and federal partners, Georgia maintains a traffic records system that supports data-driven, science-based decision-making that is necessary to identify problems, deploy and evaluate countermeasures, and efficiently allocate resources.

The Georgia Traffic Records Coordinating Committee (TRCC) continues to utilize the Traffic Safety Information System funding, received in FFY 2006-FFY 2020 from the National Highway Traffic Safety Administration (NHTSA) under Section 405c to advance its mission to maximize the overall quality of safety data and analysis based on State traffic records data across all six core systems: Crash, Vehicle, Driver, Roadway, Citation & Adjudication, and Injury Surveillance.

The Governor's Office of Highway Safety (GOHS) received the 2019 Traffic Records Assessment Final Report on June 17, 2019. The TRCC is in the process of enhancing current projects and identifying new projects that will address the recommendations listed in the 2019 Traffic Records Assessment Final Report as well as identifying performance measures for each core data system. The Georgia Traffic Records Strategic Plan is a living document that will require regular review. The TRCC Technical Committee will make any updates needed to the strategic plan and present it to the Traffic Records Executive Committee for final approval. The FFY 2021 Traffic Records Strategic Plan was approved by the Traffic Records Executive Committee for final approval on July 14, 2020.

This document highlights the progress that has been made, describes the projects and activities that will continue to improve the core data systems, and is part of the request for continued NHTSA funding in FFY 2021.

ABOUT GEORGIA'S TRAFFIC RECORDS SYSTEM

INTRODUCTION

The Georgia traffic records system assists the traffic safety community in implementing programs and countermeasures that reduce motor vehicle crashes, deaths, and injuries. Data-driven improvements rely on Georgia's traffic records system to identify opportunities to improve highway safety, measure progress, and systematically evaluate countermeasure effectiveness.

Motor vehicle traffic in Georgia reflects the state's unprecedented population growth and increase in the number of vehicles on the roads. Changes in Georgia's crash death rate per vehicle miles traveled yields a more comprehensive understanding of the state's crash problems. Georgia has made improvements to the state crash report to support further development and maintenance of our Georgia electronic accident reporting system (GEARS) crash database. One of the most recent efforts the Traffic Records Coordinating Committee (TRCC) has been working on is the update to the serious injury definition. By working with our entire safety community, we will develop a repository of timely and accurate traffic records data. This information is vital to the planning and programmatic functioning of law enforcement agencies (LEAs), governmental entities, highway safety advocates, and community coalitions.

The goal remains to assure that all highway safety partners can access accurate, complete, integrated, and uniform traffic records in a timely manner. This capability is crucial to the planning, implementation, and evaluation of highway safety programs. Georgia traffic records provides the foundation for programs to ensure they are appropriately prioritized, data driven, and evaluated for effectiveness. In the next year, the TRCC will maintain and refine the progress achieved with several programs and develop other core data system elements.

Georgia's traffic records system consists of data about Georgia's roadway transportation network and the people and vehicles that use it. This data is critical to effective safety programming, operational management, and strategic planning. Georgia's traffic records system includes the collection, management, and analysis of traffic safety data. It is comprised of six core data systems— Crash, Driver, Vehicle, Roadway, Citation and Adjudication, and Injury Surveillance—as well as the organizations and people responsible for them.

Quality traffic records data exhibiting the six primary data quality attributes—timeliness, accuracy, completeness, uniformity, integration, and accessibility—is necessary to improve traffic safety and effectively manage the motor vehicle transportation network, at the

Federal, State, and local levels. Such data enables problem identification, countermeasure development and application, and outcome evaluation. Continued application of data driven, science-based management practices can decrease the frequency of traffic crashes and mitigate their substantial negative effects on individuals and society.

GEORGIA TRAFFIC RECORDS SYSTEM COMPONENTS

Crash Component

The Georgia Department of Transportation (GDOT) is the agency responsible for crash reporting. The Georgia Electronic Accident Reporting System (GEARS) is developed and maintained by LexisNexis. GEARS serves as a portal into the State of Georgia's repository for traffic crash reports completed by Georgia law enforcement agencies. All crashes are gathered into a single statewide database; however, the methods of input vary. Crashes are entered electronically through the State user interface, transmitted via third party vendors, or submitted via paper reports. Currently, approximately 95% of the state's crash reports are transmitted electronically.

Roadway Component

The Georgia Department of Transportation (GDOT) is the agency responsible for collecting and maintaining the roadway information system for the State. GDOT maintains approximately 18,000 miles of state-owned highways and ramps. This mileage represents roughly 14.8% of the 121,500 miles of public roads in Georgia. Roadway and traffic data elements are maintained within a statewide linear referencing system (LRS) using Esri's Roads and Highways software to integrate data from multiple linear referencing system networks to get a comprehensive view of Georgia roadways. Through this system, GDOT maintains data on all 121,500 miles of public road and enables linkages between road, traffic data, crash, and other databases.

Driver Component

The Georgia Department of Driver Services (DDS) has the custodial responsibility for the driver data system, which resides on the State's mainframe. The driver system maintains commercially licensed driver data as well as critical information including driver's personal information, license type and endorsements, including all issuance dates, status, conviction history, and driver training. The State's driver data system receives input from process flow documents from other data systems, including the reporting of citations from the Georgia Electronic Citation Processing System (GECPS).

Citation & Adjudication Component

The State of Georgia has a non-unified court system where local courts are autonomous; these courts account for most traffic adjudications within the State. As a result, courts use Case Management Software that is proprietary and, for the most part, is not interoperable with other courts in the State. However, through the Georgia Electronic Conviction Processing System (GECEPS) at the Division of Driver Services, Georgia courts are able to securely and accurately transmit conviction data electronically to the State. This is a major step in overcoming the difficulties of a variety of systems that are not interoperable.

Vehicle Component

The Georgia Department of Revenue (DOR), Motor-Vehicle Division has custodial responsibility for the State vehicle records. Georgia's vehicle system, Driver Record and Integrated Vehicle Enterprise System (DRIVES), is an inventory of data that enables the titling and registration of each vehicle under the State's jurisdiction to ensure that a descriptive record is maintained and made accessible for each vehicle and vehicle owner operating on public roadways. Vehicle information includes identification and ownership data for vehicles registered in Georgia. Information on vehicle make, model, year of manufacture, body type (extracted from VIN), and adverse vehicle history (title brands) is maintained.

Injury Surveillance Component

The Georgia Department of Public Health (DPH) is responsible for the Injury Surveillance System (ISS). Georgia's comprehensive Injury Surveillance System (ISS) has data readily available from five core components: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records. These data sets enable a wide variety of stakeholders to both efficiently and effectively evaluate and prioritize motor vehicle crash related needs, such as issues related to data quality and reliable application to address patient severity, costs, and outcomes. The ISS is supported through 3 databases: (a) the State's Georgia Emergency Medical Services Information System (GEMSIS) Elite database system as Georgia's pre-hospital care reporting system, (b) the Online Analytical Statistical Information System (OASIS) that enables public and professional access to DPH's data warehouse of the latest Hospital Discharge, ER Visit, and Death data, and (c) a formal Trauma Registry maintained for all designated trauma center data and records. These records are uploaded into the CDC data query program WISQARS.

GEORGIA TRAFFIC RECORDS SYSTEM ATTRIBUTES

Timeliness

Timeliness reflects the span of time between the occurrence of some event and the entry of information from the event into the appropriate database. Timeliness can also measure the time from when the custodial agency receives the data to the point when the data is entered into the database.

Accuracy

Accuracy reflects the number of errors in information in the records entered into a database. Error means the recorded value for some data element of interest is incorrect. Error does not mean that the information is missing from the records. Erroneous information in a database cannot always be detected.

Completeness

Completeness reflects both the number of records that are missing from the database (e.g., events of interest that occurred but were not entered into the database) and the number of missing (blank) data elements in the records that are in a database.

Uniformity

Uniformity reflects the consistency among the files or records in a database and may be measured against some independent standard, preferably a national standard.

Integration

Integration reflects the ability of records in a database to be linked to a set of records in another of the six core databases-or components thereof-using common or unique identifiers.

Accessibility

Accessibility reflects the ability of legitimate users to successfully obtain desired data. Accessibility is measured in terms of customer satisfaction.

GEORGIA TRAFFIC RECORDS COORDINATING COMMITTEE

MISSION & VISION STATEMENTS

The mission of the Georgia Traffic Records Coordinating Committee (TRCC) is to provide a forum for agencies involved in highway safety to communicate with each other and develop a joint approach to improving highway safety data. The specific objective is to evolve an overall traffic records system that is an integration of current stand-alone systems into a coherent whole; one that produces complete, accurate, and timely reports for each type of traffic record and that fully supports the identification, parameterization, and mitigation of highway safety problems of any nature.

Georgia's TRCC strives to create a traffic records system that is technically state-of-the-art and fully integrated. Analyzing reliable and accurate traffic records data is central to identifying traffic safety problems and designing effective countermeasures to reduce injuries and deaths caused by crashes.

The TRCC is governed by the principals and guidelines outlined within the Georgia TRCC Charter. This foundational document describes the powers and duties of the committee as specified in enabling State legislation. This authorization empowers each member to officially participate in the State's TRCC and leverage resources, streamline processes, integrate systems, and focus on strategic investments.

Note: The Georgia TRCC Charter is included in the Appendices.

PROGRAM OVERVIEW

Georgia’s Traffic Records Coordinating Committee (TRCC) comprises a collaborative group of individuals from a variety of state agencies responsible for the improvement of the collection, management, and analysis of Georgia’s traffic record data systems. The TRCC promotes communication and sharing among partners to advance highway safety data collection and usage.

High quality data provides the foundation for traffic safety programs by supporting a data-driven, evidence-based approach to reducing motor vehicle crashes, fatalities, and injuries. Georgia’s TRCC works to ensure that complete, accurate, uniform, and timely traffic safety data is collected, analyzed, and made available for decision-making at the national, state, and local levels. Through the continual improvement of our Georgia Traffic Records program, Georgia’s TRCC will be able to provide traffic safety data to identify problems, develop countermeasures, and evaluate program effectiveness.

STRUCTURE, COMPOSITION, AND FUNCTION

TRCC Executive & Technical Committees

Georgia's TRCC consist of two committees, the Technical Committee and the Executive Committee. Both committees are comprised of a multidisciplinary membership that includes data 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, emergency medical services, injury control, driver licensing, and motor carrier agencies and organizations. The Executive Committee specifically consist of the chief executive officers (Commissioners, Directors, Administrators, etc.) of those Federal, State and Local member agencies that are responsible for major components of the Georgia Traffic Records System, or their designated agent. All Federal, State and Local agencies with a direct role in highway safety are eligible for membership in the Technical Committee. Other agencies may be members at the discretion of the Technical Committee.

The Executive Committee members hold positions within their agencies that enable them to establish policy, direct resources within their areas of responsibility, and set the vision and mission for the TRCC. The Executive Committee reviews and approves actions proposed by the Technical Committee and assists with identifying/providing resources. The Chairman of the Executive Committee is the Director of the Governor's Office of Highway Safety, Allen Poole. The TRCC Executive Committee convenes at least twice a year and whenever there is business to be conducted.

The Technical Committee is responsible – as defined by the Executive Committee – for the oversight and coordination of the State's traffic records system. The Technical Committee performs all planning, conducts all investigations, and prepares all project plans necessary to realize the mission and vision of the TRCC. The Chairman of the Technical Committee and Georgia Traffic Records Coordinator is Courtney Ruiz with the Georgia Governor's Office of Highway Safety. The TRCC Technical Committee meets at least six times a year and whenever there is business to be conducted. Additionally, this committee meets in conjunction with CODES (Crash Outcome Data Evaluation System). CODES provides data integration and data accuracy to the TRCC by engaging data owners, developing a data linkage plan, accessing data quality, preparing data, performing data linkage, evaluating linkage results, re-calibrating methods, selecting linked records, and conducting analysis.

Together, the two tiers of the TRCC are responsible for developing strategies, coordinating implementation, and tracking progress of programs and projects detailed in the TRCC's strategic plan.

Note: The Georgia TRCC meeting dates and Georgia TRCC Executive and Technical Committee membership by name, title, home organization and the core safety database represented are included in the Appendices.

TRCC Subcommittees

An additional common structural feature of Georgia's TRCC are subcommittees - both permanent and ad-hoc. Permanent subcommittees are established by Georgia's TRCC to address issues, such as data integration, which are specific to a subset of the membership and will remain as issues for the foreseeable future. For FY20, the TRCC Technical Committee created a subcommittee to develop SHSP data factsheets for traffic safety professionals and the public. Ad-hoc committees are often established to bring together subject matter experts charged with making recommendations to the full TRCC on an issue that would otherwise occupy too much time to be practically managed in the usual TRCC meeting context. For FY20, the TRCC Technical Committee established an ad-hoc committee to update the serious injury definition.

TRAFFIC RECORDS **ASSESSMENT**

Fixing America's Safety Surface Transportation Act (FAST ACT) legislation requires States to conduct or update an assessment of its highway safety data traffic records system every 5 years in order to qualify for 405(c) grant funding. Georgia's most recent Traffic Records Assessment was completed on June 17, 2019 by the National Highway Traffic Safety Administration, Technical Assessment Team. Recommendations from the result of the 2019 Georgia Traffic Records Assessment are listed below.

2019 TRAFFIC RECORDS ASSESSMENT 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.

2. Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Vehicle Recommendations

3. Improve the data dictionary for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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

5. Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Driver Recommendations

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

7. Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Roadway Recommendations

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

9. Improve the data dictionary for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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

11. Improve the procedures/process flows for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Citation/Adjudication Recommendations

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

13. Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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

15. Improve the procedures/process flows for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Injury Surveillance Recommendations

16. Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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

RECOMMENDATIONS IN PROGRESS

The state plans to address the following 2019 Traffic Records Assessment recommendations in FFY 2021.

Note: The recommendations shown below reflect the original number as assigned in the 2019 Georgia Traffic Records Assessment Final Report.

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: Georgia has developed several data quality control queries to identify data errors for each law enforcement agency in the state. The queries are run each month, and error rates are shared with agencies through our law enforcement liaisons. The queries were built through collaboration between the GDOT, GOHS and the TRCC Technical Committee.

2. Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

   Response: Georgia has initiated a new partnership with Numetric Inc. This software data analytics application provides graphical, tabular and spatial tools to improve user experience and advance the state's ability to analyze data and identify appropriate countermeasures.

Note: Refer to FFY 2021 Traffic Records Projects Numetric and LEA Technology Grant GACP.

Driver Recommendations

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

   Response: High-frequency errors are tracked and used to generate new training content and data collection manuals. The DDS Georgia Electronic Citation Processing System (GECPS) personnel provide ongoing training and assistance with the various system-generated error messages and court corrections, as well as moving registered but inactive courts from the test environment into the production environment. As a result of this training and assistance, the error rate in transmitted citations was 3% in 2018 and 2.5% in December 2019.

7. Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

   Response: Georgia is currently in the process of undergoing a major transformation of its' business systems in coordination with the Georgia Department of Revenue. The new system, Driver Record and Integrated Vehicle Enterprise System (DRIVES), will also incorporate GECPS and MVR functionality. Implementation is planned for January 2021. At this time, baseline and performance metrics have not been established. Baselines should be established in early spring, 2021.

Note: Refer to FFY 2021 Traffic Records Projects GECPS Outreach and DRIVES.

Roadway Recommendations

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

   Response: Georgia is currently working toward addressing the 2019 Traffic Records Assessment Roadway recommendations and complying with the requirements outlined in MIRE. As a part of this effort, the state has launched a partnership with Numetric Inc. that includes a spatial data analysis component where both crash and roadway data are presented through a graphical user interface.

9. Improve the data dictionary for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

   Response: Georgia is currently working towards addressing the 2019 Traffic Records Assessment Roadway recommendations and complying with the requirements outlined in the Model Inventory of Roadway Elements (MIRE). As a part of this effort, all data elements are defined to meet the metadata requirements of ESRI Roads & Highways data model.

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

    Response: Georgia is currently working towards addressing the 2019 Traffic Records Assessment Roadway recommendations and complying with the requirements outlined in MIRE. As a part of this effort, all data elements are defined to meet the metadata requirements of ESRI Roads & Highways data model.

11. Improve the procedures/process flows for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

    Response: Georgia is currently working toward addressing the 2019 Traffic Records Assessment Roadway recommendations. Further efforts to improve the procedures and process flows for the Roadway data system will be pursued in FFY 2021.

Note: Refer to FFY 2021 Traffic Records Project Numetric.

Injury Surveillance Recommendations

16. Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

    Response: The Georgia Injury Surveillance System (ISS) has taken the first step towards data quality improvement by calculating injury severity scores and making them available to the linkage process and to the Georgia Department of Transportation through the latest year of data (2018). This will help to (a) improve data quality by cross-verifying injury severity as reported on the Crash report against hospital based patient severity from inpatient Hospitalization Discharge and ER records and (b) ultimately allow us to publish this information in dashboard reports. Severity calculations (Abbreviated Injury Score and Injury Severity Scale) are now a part of our standard processes, and will be available for all data going forward.

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

    Response: Critical injury surveillance interfaces include links between EMS data and emergency department and hospital discharge data, EMS data and the trauma registry, and vital statistics and hospital discharge data. For FFY 2020 and FFY 2021, the DPH Office of EMS is working to develop a system of care armband model (similar to the EMS armband project carried out in Arkansas). The armband will be placed on Georgia system of care patients, and the armband number will be used to identify the patients progressing through care systems, starting with law enforcement and crash reports, EMS and Hospital patient care reports, and the trauma registry. This will enable reports to be deterministically linked and for a time-to-care metric to be calculated automatically and then visualized.

Note: Refer to FFY 2021 Traffic Records Projects OEMS GEMSIS Elite, OASIS, and Support for CODES Crash Data Linkage. The FFY 2021 quantitative progress reports are included in the Appendices.

NON-IMPLEMENTED RECOMMENDATIONS

The state does not intend to address the following 2019 Traffic Records Assessment recommendations in FFY 2021.

Note: The recommendations shown below reflect the original number as assigned in the 2019 Georgia Traffic Records Assessment Final Report.

Vehicle Recommendations

3. Improve the data dictionary for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

    Response: The Georgia Department of Revenue (DOR) is installing a new state-of-the-art system, Georgia DRIVES (Driver Record and Integrated Vehicle Enterprise System), to modernize the vehicle registration and titling system and integrate this system with the Department of Driver Services System. This project is currently in the early phases of implementation. The TRCC Technical Committee recently acquired a new recruit, Keith Thomas, Senior Manager, Motor Vehicle Application Dev & Support at the Georgia Department of Revenue. Through the active participation of the DOR in the TRCC, we look forward to periodic vehicle record system quality reports at our FY21 TRCC Technical Committee meetings as well as a potential opportunity for the TRCC to offer support for needed DOR vehicle record system enhancements through networking with other members of the TRCC as we move towards addressing the 2019 Traffic Records Assessment Vehicle Recommendations.

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

    Response: The Georgia Department of Revenue (DOR) is installing a new state-of-the-art system, Georgia DRIVES (Driver Record and Integrated Vehicle Enterprise System), to modernize the vehicle registration and titling system and integrate this system with the Department of Driver Services System. This project is currently in

the early phases of implementation. The TRCC Technical Committee recently acquired a new recruit, Keith Thomas, Senior Manager – Motor Vehicle Application Dev & Support at the Georgia Department of Revenue. Through the active participation of the DOR in the TRCC, we look forward to periodic vehicle record system quality reports at our FY21 TRCC Technical Committee meetings as well as a potential opportunity for the TRCC to offer support for needed DOR vehicle record system enhancements through networking with other members of the TRCC as we move towards addressing the 2019 Traffic Records Assessment Vehicle Recommendations.

5. Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

   Response: The Georgia Department of Revenue (DOR) is installing a new state-of-the-art system, Georgia DRIVES (Driver Record and Integrated Vehicle Enterprise System), to modernize the vehicle registration and titling system and integrate this system with the Department of Driver Services System. This project is currently in the early phases of implementation. The TRCC Technical Committee recently acquired a new recruit, Keith Thomas, Senior Manager – Motor Vehicle Application Dev & Support at the Georgia Department of Revenue. Through the active participation of the DOR in the TRCC, we look forward to periodic vehicle record system quality reports at our FY21 TRCC Technical Committee meetings as well as a potential opportunity for the TRCC to offer support for needed DOR vehicle record system enhancements through networking with other members of the TRCC as we move towards addressing the 2019 Traffic Records Assessment Vehicle Recommendations.

Citation/Adjudication Recommendations

12. Improve the applicable guidelines for the Citation and Adjudication systems to reflect best practices identified in the Traffic records Program Assessment Advisory.

    Response: In July 2019, the Administrative Office of the Courts (AOC), organization responsible for the Citation/Adjudication data system, suffered a massive ransomware attack. While AOC has rebuilt some of their modules, they have decided to discontinue the application (TIPS) that supported GECPS data entry. Since July, those courts without court management software have been sending paper citations to the Department of Driver Services for the convictions to be manually keyed. DDS has experienced delays in submission of real-time processing of convictions due to the ransomware attack and the application removal at AOC. Since the data breach, the TRCC Technical Committee has had no success engaging AOC personnel at the Technical Committee level. The plan for FY21 is to identify the appropriate personnel at AOC to participate on the TRCC Technical Committee in order to work towards addressing the 2019 Traffic Records Assessment Citation/Adjudication recommendations.

13. Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

    Response: In July 2019, the Administrative Office of the Courts (AOC), organization responsible for the Citation/Adjudication data system, was hit with a massive ransomware attack. While AOC has rebuilt some of their modules, they have decided to discontinue the application (TIPS) that supported GECPS data entry. Since July, those courts without court management software have been sending paper citations

to the Department of Driver Services for the convictions to be manually keyed. DDS has experienced delays in submission of real-time processing of convictions due to the ransomware attack and the application removal at AOC. Since the data breach, the TRCC Technical Committee has had no success engaging AOC personnel at the Technical Committee level. The plan for FY21 is to have the AOC executive leadership identify the appropriate personnel at AOC to participate on the TRCC Technical Committee in order to work towards addressing the 2019 Traffic Records Assessment Citation/Adjudication recommendations.

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

    Response: In July 2019, the Administrative Office of the Courts (AOC), organization responsible for the Citation/Adjudication data system, was hit with a massive ransomware attack. While AOC has rebuilt some of their modules, they have decided to discontinue the application (TIPS) that supported GECPS data entry. Since July, those courts without court management software have been sending paper citations to the Department of Driver Services for the convictions to be manually keyed. DDS has experienced delays in submission of real-time processing of convictions due to the ransomware attack and the application removal at AOC. Since the data breach, the TRCC Technical Committee has had no success engaging AOC personnel at the Technical Committee level. The plan for FY21 is to have the AOC executive leadership identify the appropriate personnel at AOC to participate on the TRCC Technical Committee in order to work towards addressing the 2019 Traffic Records Assessment Citation/Adjudication recommendations.

15. Improve the procedures/process flows for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

    Response: In July 2019, the Administrative Office of the Courts (AOC), organization responsible for the Citation/Adjudication data system, was hit with a massive ransomware attack. While AOC has rebuilt some of their modules, they have decided to discontinue the application (TIPS) that supported GECPS data entry. Since July, those courts without court management software have been sending paper citations to the Department of Driver Services for the convictions to be manually keyed. DDS has experienced delays in submission of real-time processing of convictions due to the ransomware attack and the application removal at AOC. Since the data breach, the TRCC Technical Committee has had no success engaging AOC personnel at the Technical Committee level. The plan for FY21 is to have the AOC executive leadership identify the appropriate personnel at AOC to participate on the TRCC Technical Committee in order to work towards addressing the 2019 Traffic Records Assessment Citation/Adjudication recommendations.

FFY 2021 TRAFFIC RECORDS PROJECTS

These projects will address the 2019 Traffic Records Assessment recommendations in progress.

	Project Title	Status	Lead Agency	405c TR Funded
	GA Traffic Records Program	In Process	GOHS	Yes
Project Description	This project uses NHTSA Section 405(c) funds to fund the GOHS GA Traffic Records program staff and traffic records information systems' projects to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of Georgia's traffic records data.			
Project Objective	To improve the accuracy, timeliness, accessibility, integration, & uniformity of the Georgia traffic records information system			
Data Attribute(s)	Accuracy, Completeness, Timeliness, Uniformity, Accessibility, and Integration			
Core Traffic Records System Component(s)				

	Project Title	Status	Lead Agency	405c TR Funded
	OEMS GEMSIS Elite	In Process	GA Department of Public Health	Yes
Project Description	The Georgia Office of EMS and Trauma (OEMS) developed the Georgia Emergency Medical Services Information System (GEMSIS) as Georgia's pre-hospital care reporting system. This project uses NHTSA Section 405c funds to continually upgrade, support, and maintain the GEMSIS in NEMSIS v3.4.0, to archive the NEMSIS 2.2.1 data, to begin work to prepare GEMSIS for NEMSIS v3.5.0 (release expected in 2019 with expected transition in 2021/2022), to maintain the GEMSIS Datamart, and to progress towards achieving the time-to-care metric through deterministic linking of EMS data.			
Project Objective	To improve the accuracy of EMS patient care reports via GEMSIS Elite training and to link EMS data on patients with critical injuries in motor vehicle crashes with GDOTs crash database via deterministic data linking of crash, EMS and trauma registry reports using the system of care armbands			
Performance Measure(s)	(1) Average time that 911 records are submitted to GEMSIS Elite (2) Average incident validation score (based on the Georgia Schematron) for all incidents in GEMSIS Elite			
Data Attribute(s)	Accuracy, Completeness, Uniformity, Timeliness			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	GECPS Outreach	In Process	GA Department of Driver Services	Yes
Project Description	This project provides a secure and accurate method of electronic transmission of conviction data from Georgia courts to the State within 10 days of adjudication as well as trains and educates courts on the Georgia Electronic Conviction Processing System (GECPS) for this purpose. This project continues to support Georgia courts and law enforcement by continuing to provide additional functionality/enhancements to the GECPS system for electronic submission of conviction processing.			
Project Objective	Reduce error rates by identifying and targeting courts that require additional training and technical assistance by studying errors and by attending to court support requests.			
Performance Measure(s)	(1) The length of time between receipt of a conviction by DDS and updating of the driver record (2) Percentage of transmitted citations to GECPS with no errors in critical data elements (3) The percentage of appropriate records in the driver file that is linked to the vehicle file			
Data Attribute(s)	Accuracy, Timeliness, Integration			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	Support for CODES Crash Data Linkage	In Process	GA Department of Public Health	Yes
Project Description	The Georgia Crash Outcome Data Evaluation Systems (CODES) project uses probabilistic techniques to link crash data and other injury surveillance data. This project creates linked data for analysis by Georgia's highway safety partners to improve the accuracy and integration of the state's traffic records data in direct support of NHTSA's performance measure criteria. This provides a path for public health, highway safety, and other partners to collaborate on the prevention of crashes.			
Project Objective	To develop and maintain relationships with data owners, users, and injury prevention stakeholders to link crash data and other injury surveillance data as well as to promote the creation and use of integrated datasets.			
Data Attribute(s)	Integration, Accuracy			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	LEA Technology Grant GACP	In Process	GA Association of Chiefs of Police	Yes
Project Description	This project provides select law enforcement agencies (LEAs) with the computer hardware needed to submit crash reports electronically to the state through the GEARS system as mobile data units.			
Project Objective	To improve crash reporting accuracy by law enforcement agencies through electronic crash reporting that will validate, detect, and prevent errors at the point of data entry. Improve the timeliness of crash reports submitted to GEARS by replacing paper records with electronic records.			
Performance Measure(s)	(1) The percentage of crash records with no errors in critical data elements Metric: 95% (2) The percentage of crash reports submitted electronically into GEARS Metric: 100%			
Data Attribute(s)	Accuracy, Timeliness			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	OASIS	In Process	GA Department of Public Health	Yes
Project Description	The Online Analytical Statistical Information System (OASIS) project has developed an extensible departmental data warehouse to implement data standards and standardization processes with quality controls as well as to integrate multiple data sources. Continuous, direct access to Hospital discharge and Emergency Room visit data, Death data and Motor Vehicle crash data, analysis, charts, and mapping are provided via an online query based on the data warehouse.			
Project Objective	To improve the accessibility, completeness and quality of Georgia's traffic records system by enhancing the OASIS data repository with additional health and demographic indicators, updated data sets, cross-source quality checks and new ways of visualizing data.			
Performance Measure(s)	TBD – The plan moving forward is to request technical assistance via a GO Team application for further assistance with our injury severity tool in establishing performance measures for this type of project in order to demonstrate improvement.			
Data Attribute(s)	Accessibility, Completeness, Integration			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	Numetric	In Process	GA Department of Transportation	No
Project Description	Georgia is developing tools through Numetric to improve the analysis of the state's crash database. This software data analytics application provides graphical, tabular and spatial tools to explore crash data in a GIS interface to pinpoint the root causes of crashes and identify the best countermeasures. Additionally, network screening is offered to rank segments, curves, and intersections by the attributes that matter most to Georgia traffic safety stakeholders as well as access to workbooks with customizable static reports, dashboards, and analytics tools.			
Project Objective	To improve the user experience and advance the state's ability to analyze data and identify appropriate countermeasures as well as enable our law enforcement liaisons to work with individual law enforcement agencies to improve the timeliness, accuracy and completeness of their crash reports			
Performance Measure(s)	(1) Percentage of state crash reports submitted within 72 hours of the crash Metric: 95% (2) Percentage of crash records with no missing data elements Metric: 98% (3) Percentage of crash records with no errors in critical data elements Metric: 95%			
Data Attribute(s)	Timeliness, Accuracy, Completeness			
Core Traffic Records System Components				

	Project Title	Status	Lead Agency	405c TR Funded
	DRIVES	In Process	GA Department of Revenue	No
Project Description	The Georgia Department of Revenue (DOR) is installing a new state-of-the-art system, Georgia DRIVES (Driver Record and Integrated Vehicle Enterprise System), to modernize the vehicle registration and titling system.			
Project Objective	To enhance data integrity			
Performance Measure(s)	TBD – This system is in the early phases of implementation.			
Data Attribute(s)	Accessibility, Completeness, Integration			
Core Traffic Records System Components				

APPENDICES

Georgia's Traffic Records Coordinating Committee (TRCC) Charter

1 Traffic Records Definition

Traffic Records are those records and databases residing in all agencies and jurisdictions that are or could be useful in identifying Highway Safety problems, formulating programs to mitigate these problems, and evaluating the results of these programs. These Traffic Records are not necessarily under the control of TRCC members, nor are they necessarily targets of the TRCC's improvement projects. These Traffic Records include, but are not limited to:

a. Primary Databases, which contain data directly bearing on crashes, causes, and consequences :
   - Crash Reports
   - Fatal Accident Reporting System (FARS)
   - EMS Patient Care Reports
   - Hospital In-Patient Discharge Reports
   - Trauma Registry
   - Traffic Citations
   - Motor Carrier Safety Inspection Reports
   - Driver Records
   - Death Certificate Records
   - Injury Surveillance (DPH/OEMS)

b. Supporting Databases, which provide location specific, context, or other supporting data:
   - Road Characteristics File, describing relevant parameters of roads
   - Statewide and jurisdiction specific road maps, including both geometric parameters and standard names and route designations for all roads
   - Vehicle Title and Registration Records

These various Traffic Record types will be referred to hereafter as Traffic Record Systems (or information systems) if referring to the processes of collecting, communicating, storing, and analyzing the data; or as a record or database if referring to the data itself.

2 Rationale for a TRCC

The individual records of the Traffic Record databases identified above originate from local or state agencies, and statewide databases are maintained by a State agency or, in some cases, are non- existent. Responsibility for the various components (collection, storage, etc.) of many of these Traffic Record Systems, at both the state and local level, is spread among many agencies with very different primary functions or missions.

In order for these various Traffic Record databases to be useful in addressing highway safety problems, the exchange of data between agencies, and integration of data between various information systems must be both possible and efficient. Since these information systems were independently developed over the last several decades, data sharing is barely, if at all, possible, and is certainly not efficient.

Each of the agencies involved with these Traffic Record Systems have their own missions and priorities. Communication between the involved agencies is typically limited to those subjects of direct mutual interest. For this reason, and because each agency is funded and held responsible only for its own mission, cooperation between agencies is also usually limited to known mutual interests. These agencies typically have limited knowledge of each other's organization, operations, information systems, and data needs.

The solution, assuming willing partners, is a forum in which each agency involved with Traffic Records can periodically meet to discuss their missions, organizations, operational processes, information system activities, data products, data needs, etc. The overall objective of these exchanges is to find ways for the agencies to work more synergistically; i.e., to accomplish their missions more effectively and efficiently than is possible if each acts strictly on its own. This is especially critical for those Traffic Record Systems whose components and users are spread across many local and state agencies; e.g., Crash Reports, Traffic Citations, and EMS Run Records. *The TRCC is the forum for accomplishing this inter-agency communication and developing a team approach to improving highway safety information.*

3 Background

Traffic Records Coordinating Committees, or their equivalents with other names, exist in many states. In 1997, the Transportation Efficiency Act for the 21st Century (TEA-21) and implementing Federal regulations established a program to encourage the formation of TRCCs in all States, this is usually referred to as Section 411. Section 411 allowed grants to States that would establish multidisciplinary (agencies with all involved functions) TRCCs and commit them to the goal of improving the State's traffic record systems. An audit of the State's traffic record systems was conducted to identify areas that needed improvement, and a strategic plan was required to define how the State would go about improving its traffic record systems. The Section 411 grants were available for a maximum of six years, expiring in federal FY2003. Georgia received three years of Section 411 grants for its TRCC.

Georgia had a TRCC during the years 2000 through 2003. While that TRCC made significant progress in some areas, it was not able to produce a comprehensive and coordinated program for improving Georgia's Traffic Records. Many of the TRCC's problems can be directly attributed to the lack of a charter, formal structure, or procedural rules. This situation resulted in an inability to formulate recommendations, present these recommendations to member agencies' management, and obtain member approval and funding for the recommendations. This TRCC was effectively disbanded in early 2003.

In 2005, a reconstituted TRCC was established. If this TRCC is to be effective, its mission, structure, and procedures must be formalized. In addition, the methods by which the committee will influence its members must be determined, and approaches to funding and implementing recommended programs must be defined. These are the purposes of this document.

4 TRCC Mission

The mission of the TRCC is as follows:

"The Traffic Records Coordinating Committee will provide a forum for agencies involved in highway safety to communicate with each other and develop a joint approach to improving highway safety data. The specific objective is to evolve an overall Traffic Records System that is an integration of current stand-alone Systems into a coherent whole; one that produces complete, accurate, and timely reports for each type of traffic record and that fully supports the identification, parameterization, and mitigation of highway safety problems of any nature."

5 Traffic Records Vision

This vision statement describes the desired state of Georgia's Traffic Records at some unspecified point in the future. Member agencies are not committed to a specific timeline for achievement of this vision.

Georgia's Traffic Record Systems should be technically state-of-the-art and fully integrated with each other. To support this objective:

- Relevant records of events (crashes, citations, etc.), vehicles, roadways, and individuals (with appropriate protection of privacy rights) within all systems should be capable of being linked to provide a more complete picture of events, circumstances, causes, and consequences.
- The data within all systems should be consistent, compatible and integrated, and similar data items should be comparable.
- Each of Georgia's Traffic Record Systems should produce complete, accurate, and timely reports. For most of the Primary Databases, achievement of this objective requires:
- Reports should be prepared electronically, potentially at the location of the event being reported, and error detection and correction should be performed at the time of report preparation.
- Reports should be processed and electronically communicated as soon as possible after collection to both local and statewide databases as appropriate.
- Reports should be entered into the appropriate databases, local and state, as soon as possible after receipt.
- Individual reports should be available to legitimate and authorized users as soon as possible after entry into the appropriate databases.

Georgia's Traffic Record Systems should allow users to quickly identify emerging highway safety problems and issues, as well as quantify trends in highway safety statistics. Mitigation strategies can be developed and implemented in a time frame appropriate for both urgent problems and undesirable trends. Follow-up evaluations can be conducted to determine the effectiveness of mitigation strategies. This objective would be implemented by automated and manually activated analysis tools that can:

- Access all Traffic Records Systems,
- Identify associated records across all Traffic Records Systems,
- Integrate data from all associated records and databases, and
- Produce comprehensive and easily understood reports/views of the events, causes, and consequences associated with specific emerging problems or statistical trends.

6 TRCC Structure, Function and Composition

6.1.1 TRCC Structure and Composition- the State traffic records coordinating committee:

1. Is chartered;

2. Meets at least three times annually

3. Has 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; and at least one member represents each of the following core safety databases:

    (A) Crash;
    (B) Citation or adjudication;
    (C) Driver;
    (D) Emergency medical services or injury surveillance system;
    (E) Roadway; and
    (F) Vehicle.

4. Has a designated TRCC coordinator.

6.1.2 TRCC Functions- The traffic records coordinating committee shall-

1. Have authority to review the State's highway safety data and traffic records systems and any changes to such systems before the changes are implemented;

2. Consider and coordinate the views of organizations in the State that are involved in the collection, administration, and use of highway safety data and traffic records systems, and represent those views to outside organizations;

3. Review and evaluate new technologies to keep the highway safety data and traffic records system current; and

4. Approve annually the membership of the TRCC, the TRCC coordinator, any change to the State's multi-year Strategic Plan, and performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility or integration of a core highway safety database.

The TRCC shall consist of two committees, which shall be referred to as the Executive Committee and the Technical Committee. The responsibilities, membership, officers, and procedures of each are addressed hereafter.

- ***Executive Committee***

6.1.3 Membership

The Executive Committee shall consist of the chief executive officers (Commissioners, Directors, Administrators, etc.) of those Federal, State and Local member agencies that are responsible for major components of the Traffic

Records System, or their designated agent. Designated agents must have direct access to and be able to speak for the chief executive officer, at least after consultation, on any issue before the Executive Committee.

Members of the Executive Committee shall include, but not be limited to, the following agencies:

- Governor's Office of Highway Safety
- Department of Transportation
- Department of Driver Services
- Department of Public Health
- Department of Revenue
- Department of Public Safety
- Georgia Association of Chiefs of Police
- Georgia Sheriffs Association
- Administrative Office of the Courts
- Prosecuting Attorney's Council
- National Highway Traffic Safety Administration
- Federal Highway Administration
- Federal Motor Carrier Safety Administration

6.1.4 Responsibilities

The Executive Committee shall perform all executive functions necessary to realize the TRCC's mission and vision. In particular, the Executive Committee shall consider recommendations of the Technical Committee, decide whether the recommendations shall be implemented, and if the decision is to implement, assist with identifying/providing resources. In addition, the Executive Committee may unilaterally promulgate changes it deems necessary to improve the Technical Committee, including its membership, responsibilities, officers, and procedures. The Executive Committee shall review and approve any changes to the Traffic Records Strategic Plan.

6.1.5 Officers

The officers of the Executive Committee shall consist of the Chairman and the Traffic Records Coordinator (hereafter referred to as the Coordinator). The permanent chairman of the Executive Committee shall be the Director of the Governor's Office of Highway Safety. The Chairman shall be responsible for calling meetings of the Committee and setting the agenda. The Coordinator shall be responsible for making meeting arrangements, preparing and publishing minutes, and coordinating all interactions between the Executive and Technical Committees.

6.1.6 Procedures

The Executive Committee shall meet at least quarterly and whenever necessary to consider recommendations from the Technical Committee or to conduct other necessary committee business. The Executive Committee shall establish any formal procedures it deems necessary to accomplish its responsibilities. The Executive Committee shall approve annually the membership of the TRCC, the selected TRCC Coordinator, and any changes to the Strategic Plan.

- **Technical Committee**

6.1.7 Membership

All Federal, State and Local agencies with a direct role in highway safety are eligible for membership in the Technical Committee. Other agencies may be members at the discretion of the Technical Committee.

Federal agencies eligible for membership include, but are not limited to:
National Highway Traffic Safety Administration
Federal Highway Administration
Federal Motor Carrier Safety Administration

The state agencies eligible for membership include, but are not limited to:

- Governor's Office of Highway Safety
- Department of Driver Services
- Department of Transportation
- Department of Public Safety
- Department of Public Health/Injury Surveillance and Control
- Department of Revenue
- Administrative Office of the Courts
- Prosecuting Attorney's Council
- Georgia Bureau of Investigation
- Georgia Brain and Spinal Injury Trust Fund Commission

The categories of local agencies eligible for membership include, but are not limited to:

- Police Departments and Sheriff Offices
- EMS Providers
- Road/Street and Traffic Engineering

Data Users eligible for membership include, but are not limited to:

- University researchers,
- Highway safety advocacy groups

The actual membership is based on voluntary participation. However, the TRCC must strive to have a membership of all listed Federal and State agencies and a representative number of local agencies in the listed categories. A desirable number of local agencies would be roughly equal to the number of State Agencies.

The Technical Committee shall consist of those managers, or their representatives, responsible for traffic records systems components that exist within each member agency or for which the member has oversight responsibility. In general, the members of the Technical Committee should be technically oriented, from their agency's perspective, and able to actively contribute to the work of the committee. Specific categories for members of the Technical Committee are as follows:

- Representatives, who are the formal representatives of their agency or organization to the Technical Committee, who are expected to attend all meetings and participate in all consensus building efforts.
- Voting Representatives are the representatives of those member agencies who may vote on recommendations before the Technical Committee, and who are responsible for coordinating their agency's position and casting their agency's vote(s).
- Member agency employees, who may participate in any and all meetings and discussion s as desired by their Representative.

- Guests, who are not employees of any member agency, but have been invited by a member agency, the Chairman, or the Coordinator. Guests may participate in meetings and discussions as desired by the member agency inviting them.

A Representative and one or more alternates shall be selected by each member agency. In the absence of an official designation, the senior (position) individual of the agency at any meeting is assumed to be the Representative of that agency. The Representative of each state and local member agency, or an alternate if the Representative is absent, is the Voting Representative.

6.1.8 Responsibilities

The Technical Committee shall perform all planning, conduct all investigations, and prepare all project plans necessary y to realize the mission and vision of the TRCC. Specifically required products of these activities are detailed in section 7.E of this document. Other products may be produced as necessary to fulfill these responsibilities.

6.1.9 Officers

The Technical Committee shall have the following officers:

- A Chairman that is responsible for calling meetings, preparing and distributing an agenda, guiding the meetings in accordance with the agenda, assuring that minutes are kept, and otherwise assuring that the committee's business is conducted in accordance with established procedures.
- A Traffic Records Coordinator (or Coordinator), who must be technically competent in all aspects of Traffic Records Systems, and who is responsible for preparing the strategic plan, planning for annual technical objectives, preparing agenda items dealing with technical issues , and otherwise guiding the committee in achieving its mission.

The Chairman and Coordinator are selected in accordance with Technical Committee procedures outlined in the following section. These may be a single individual or two separate individuals.

7 Technical Committee Procedures

These procedures address the most common needs of the Technical Committee; i.e., selection of the Chairman and Coordinator, conduct of meetings, making decisions on issues before the committee, making recommendations for improving Traffic Records System components under the members' control, and adopting new or modified procedures.

Selection of the Chairman

The chairman of the Technical Committee shall be selected from the following options, as recommended by vote of the Voting Representatives and approved by the Executive Committee: The Coordinator may serve as the Chairman, or Member agencies may appoint one of their Representatives to serve as chairman on a rotating basis.

If, after the initial selection, a change is desired, the Voting Representatives may decide annually, which option to select for the upcoming federal fiscal year (October through September). If the rotating Chairmanship is selected, the rotation sequence

among member agencies must be determined at that time, and cannot be revoked until the rotation is completed except by unanimous agreement among the rotating member Representatives.

- **Conduct of Technical Committee Meetings**

Technical Committee meetings shall be held at least quarterly and whenever there is business to be conducted. The time and place of the next meeting shall be established at the end of each meeting. The meetings should be held on a standard day of the month and time of day to the degree possible.

Minutes shall be prepared and distributed to all members within two weeks after a meeting. The minutes shall contain a list of all attendees, indicating the agency represented. The minutes shall document all major issues discussed, the key points of the discussion, any actions taken, any decisions made, and recommendations formed with respect to the issues. The minutes of each meeting shall be formally reviewed, corrected, and approved at the next meeting.

Technical Committee meetings shall be conducted in accordance with Robert's Rules of Order.

Decisions shall be made by consensus of all present member Representatives when possible, unless specified otherwise in these procedures. If consensus cannot be reached for formal recommendations to the Executive Committee, decisions shall be made by vote of the Voting Representatives. No formal recommendations may be made or votes taken unless a quorum is present. A quorum is defined to be 50% of current Voting Representatives or an authorized alternate. All official decisions are by a simple majority of the vote unless otherwise explicitly required in written procedures for the business at hand.

The Chairman and Coordinator have no vote on business matters before the Technical Committee, except in the case of a tie. The Chairman shall cast the tie-breaking vote on non-technical and Technical Committee procedure matters. The Coordinator shall cast the tie-breaking vote on technical matters. Each state member and local member category has the number of votes assigned elsewhere in this document.

- Number of Votes Assigned Member Agencies

For the purposes of voting on issues before the Technical Committee, the following member Agencies, or categories of member agencies, are assigned the number of votes indicated.

- Governor' s Office of Highway Safety - 1 vote
- Department of Driver Services - 1 vote
- Department of Transportation - I vote
- Department of Public Health, Injury Prevention - 1 vote
- Department of Public Health, Office of EMS and Trauma - 1 vote
- Department of Public Health, Office of Health Indicators for Planning - 1 vote
- Department of Public Safety - 1 vote

- Police Departments - 1 vote
- Sheriff Offices - 1 vote
- Administrative Office of the Courts - 1 vote
- Prosecuting Attorney' s Council - 1 vote
- Local Traffic/Road Engineering Agencies - 1 vote
- Local EMS Providers - 1 vote

Each voting member, or category of members, may vote on any issue before the Technical Committee. Members of the categories (Local Enforcement, Traffic Engineering, EMS Providers, etc.) must decide among themselves how to cast their votes. There must be at least two members of the category present or having provided written voting instructions in order to cast two votes. If only a single member agency of the category is present, and no written voting instructions are available from absent member(s), only one vote may be cast. If the issue to be voted upon has no direct impact on an agency, they may not be permitted to vote. Those cases will be determined by the Chairman on an issue-by-issue basis.

Voting/non-voting status and the assigned number of votes for each member/category may be changed as with any other Technical Committee procedure; i.e., any member, the Chairman, or the Coordinator may propose a change, the recommendation must be approved by the current voting members, and the Executive Committee must approve the change.

- **Subcommittees**

From time to time, subcommittees will be required to conduct the more detailed aspects of the Technical Committee's business. Establishment of a subcommittee shall require the approval of the member Representatives. After approval, the individuals to serve on these subcommittees will be selected jointly by the Chairman and Coordinator. The Chairman shall have final authority if the subcommittee will address a non-technical matter. The Coordinator shall have final authority if the subcommittee will address a technical matter. To the degree feasible and appropriate, all categories of member agencies should be represented on subcommittees.

- **Traffic Record System/Component Recommendations**

The Technical Committee shall recommend a long range Strategic Plan and year-to-year specific improvement projects for the State's Traffic Record Systems; both aimed at achieving the vision set forth herein. In many, if not most cases, the specific projects involve multiple agencies and multiple components of at least one Traffic Records System. In all cases, one or more member agencies must agree to the recommended project and find a way to implement the improvement.

The primary Technical Committee recommendations to member agencies shall take the form of a single long-range Strategic Plan and an Annual Plan each year identifying specific projects to be addressed that year.

The Strategic Plan is developed once, approved by the Technical Committee's Voting Representatives, and updated annually along with the Annual Plan.

Once a complete and approved Strategic Plan is in place, the procedure for

accomplishing this objective is:

- In November of each year, the Coordinator prepares an Update to the Strategic Plan (if needed), a draft Annual Plan for the upcoming year, and a report of progress and status for the current year's activities. These items are submitted to the Technical Committee at its November meeting. Funding requirements for each proposed program and suggested responsibility shall be included in the draft Annual Plan.
- During the November-December time frame, each Voting Representative shall present the draft Annual Plan to their agency's management and determine the agency's position on those elements directly affecting the agency. Primary and alternate funding possibilities shall specifically be addressed in these discussions. The Coordinator should be involved in these discussions when beneficial.
- The Technical Committee shall deliberate the content of the Annual Plan at its December meeting. Results of internal agency discussions shall be presented. Finally, the Technical Committee shall determine changes to be made to the Annual Plan.
- The Coordinator shall make the required changes and provide to all member Representatives as quickly as possible. The Technical Committee shall vote on the Plan at its January meeting.
- The approved Plan shall be sent to the Executive Committee, with a formal request from the Chairman and Coordinator for support of the program.

During the course of the year, if either the Technical Committee or a member agency feels the need for additional recommendations, a similar process shall be followed; i.e.:

- The requested recommendation shall be presented to the Technical Committee by the Chairman, Coordinator, or member Representative who has identified the need.
- The Coordinator, working in concert with the originator, shall investigate and develop necessary documents, plans, etc. needed to formalize the recommendation.
- The recommendation shall be presented internally to each member agency by the agency's Representative to develop a position, identify funding needs and possible sources, etc., as appropriate. The originator and/or Coordinator should be involved as beneficial.
- The Technical Committee shall deliberate the recommendation at its next meeting, receive input from all member Representatives, and determine necessary changes.
- After making all required changes, the Coordinator shall distribute the recommendation to all member Representatives as soon as possible. The Technical Committee shall decide on the recommendation at the next Technical Committee meeting.
- Approved Recommendations shall be sent to the Executive Committee, with a formal request from the Chairman and Coordinator for approval and support.

When time is critically short, the above process can be shortened through the use of e-mail for distribution of documents, and votes by either or both the Technical and Executive Committees may be conducted via e-mail.

8 Certification andSignature

I hereby certify that this is the current TRCC Charter, as approved by the TRCC Executive Committee.

Director Allen Poole
Chairman
TRCC Executive Committee

Date 5-6-19

GEORGIA TRCC:
EXECUTIVE COMMITTEE MEMBERSHIP

Georgia Governor's Office of Highway Safety	Allen Poole, Director, TRCC Executive Committee Chairman
Georgia Department of Transportation **Core System: Crash & Roadway**	Russell McMurry, Commissioner
Georgia Department of Driver Services **Core System: Driver**	Spencer Moore, Commissioner
Georgia Department of Public Health **Core System: Injury Surveillance**	Lisa Dawson, Director of Injury Prevention
Prosecuting Attorneys' Council of Georgia **Core System: Adjudication**	Peter J. Skandalakis, Executive Director
Georgia Department of Revenue **Core System: Vehicle**	Lynne Riley, Commissioner
Georgia Department of Public Safety **Core System: Crash & Citation**	Col. Gary Vowell, Commissioner
Georgia Association of Chief Police **Core System: Crash & Citation**	A.A. "Butch" Ayers, Executive Director
Georgia Sheriffs Association **Core System: Crash & Citation**	J. Terry Norris, Executive Director
Administrative Office of the Courts (AOC) **Core System: Citation & Adjudication**	Darron J. Enns, Esq., Policy Analyst
National Highway Traffic Safety Administration (NHTSA)	Carmen Hayes, NHTSA Region 4, Regional Administrator
Federal Highway Administration (FHWA)	Greg Morris, Safety, ITS & Traffic Management Engineer
Federal Motor Carrier Safety Administration (FMCSA)	Clinton Seymour, Georgia Division Administrator

GEORGIA TRCC:
TECHNICAL COMMITTEE MEMBERSHIP

Georgia Department of Transportation **Core System: Crash & Roadway**	Dave Adams, State Safety Program Manager Bill Williams, Crash Analyst Bryan Vann, Assistant State Safety Data Manager
Georgia Office of EMS and Trauma **Core System: Injury Surveillance**	David Newton, EMS Director Renee Morgan, Trauma Program Director Danlin Luo, Trauma Epidemiologist
Georgia Department of Driver Services **Core System: Driver**	Cynthia Zimmerman, Information System Support Specialist
Georgia Department of Public Health **Core System: Injury Surveillance**	Office of Health Indicators for Planning (OHIP) David Austin, Director of Data Quality & Analysis Team Injury Surveillance and Prevention Program Lisa Dawson, Director of Injury Prevention Elizabeth Head, Deputy Director of Injury Prevention Denise Yeager, CODES Lead/Data Evaluation Patricia Daniel, CODES Quality Assurance Specialist Chinyere Nwamuo, CORE Grant Manager
Georgia Department of Revenue **Core System: Vehicle**	Keith Thomas, Senior Manager, Motor Vehicle Application Development & Support
Safe Kids Georgia **Core System: Injury Surveillance**	Mahwish Javed, Program Coordinator
Injury Prevention Research Center @ Emory (IPRCE) **Core System: Injury Surveillance**	Jonathan Rupp, IPRCE Executive Associate Director Sharon Nieb, IPRCE Associate Program Director
LexisNexis /Robert Franklin Dallas, LLC **Core System: Crash**	Robert Dallas, Attorney
National Highway Traffic Safety Administration	Belinda Jackson, Region 4 Program Manager
Georgia Governor's Office of Highway Safety	Eshon Poythress, Strategic Highway Safety Plan Manager Courtney Ruiz, Georgia Traffic Records Coordinator Shenee Bryan, Epidemiologist
Administrative Office of the Courts **Core System: Citation & Adjudication**	TBD

GEORGIA TRCC: MEETING DATES

TRCC Technical Committee

- July 10, 2019
- September 11, 2019
- November 13, 2019
- January 08, 2020
- March 11, 2020
- May 13, 2020
- July 08, 2020

TRCC Executive Committee

- October 24, 2019
- April 28, 2020 – Canceled due to COVID-19

Section 405c Quantitative Progress Report

State: GA Report Date: 6/1/2020 Submitted by: D. Newton

Regional Reviewer:

System to be Impacted	**____CRASH ___DRIVER ____VEHICLE ____ROADWAY ____CITATION/ADJUDICATION __X__EMS/INJURY OTHER specify:**
Performance Area(s) to be Impacted	**____ACCURACY ____TIMELINESS _X___COMPLETENESS ____ACCESSIBILITY __X__UNIFORMITY ____INTEGRATION OTHER specify:**
Performance Measure used to track Improvement(s)	**Narrative Description of the Measure** There will be an increase in the number of patient care reports (PCRs) submitted to GEMSIS. There will be an increase in the percentage of V3.4 records (compared to V2). Version 3.4 was mandated due to the inability of the NEMSIS TAC to receive V2.2 data any more, and because the Version 3.4 data standard is more robust - it has more data elements that collect better information on injuries, stroke, STEMI, etc., and it uses ICD-10 codes instead of the outdated ICD-9 codes that Version 2.2 used. Version 3.4 also has more robust validation rules, including Schema rules that enforce the minimum completeness of national data elements, as well as Schematron rules that allow for our state to enforce completeness of other data elements. For example, we require that on all transports (eDisposition.12), that the data for Destination County be completed. Without this validation rule, we would not have as complete of a record. This is just one example of the validation rules that we use – we currently have 255 EMS validation rules, and are adding more. Another benefit of Version 3.4 over Version 2.2 is that in Version 2.2, the incident was sent to the state from 3rd party software vendors in large chunks at a time, sometimes over 1000 calls in one file – if one of those records was corrupted, then the entire file would be rejected. In the Version 3.4 data standard, incidents are sent over one (1) call at a time, so this ensures that one record being invalid only affects one event; thereby, allowing the captured records to be more complete. **Submission to Version 3.4 (GEMSIS Elite) became mandatory on April 1, 2018.**
Relevant Project(s) in the State's Strategic Plan	**Title, number and strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates** GA-P-21, Enhancements to GEMSIS EMS Database OEMS GEMSIS Elite, FFY 2021 Georgia Traffic Records Strategic Plan, p.19
Improvement(s) Achieved or Anticipated	**Narrative of the Improvement(s)** GEMSIS includes both the V2 NEMSIS data, and the Elite system, which is V3.4 of the NEMSIS data set. In 2012-2013 (April – March), there were 1,641,885 records submitted, and 100% of the records were V2 records. From April 2017- March 2018, there were 2,171,490 records submitted, with 89.702% being V2 and 10.298% V3.4. From April 2018-March 2019, there were 2,305,119 records submitted, with only 2.976% being V2, and 97.024% being Version 3.4.

	From April 2019 – March 2020, there were 2,586,964 calls completed, of which, 100% are Version 3.4. This is due to the mandatory implementation of V3.4 as of 4/1/2018. During the same timeframe, 2,899,241calls were submitted, even though those calls may not have occurred during the timeframe.
Specification of how the Measure is calculated / estimated	**Narrative Description of Calculation / Estimation Method** The number of PCRs submitted to GEMSIS (V2) and GEMSIS Elite (V3.4) was queried.
Date and Baseline Value for the Measure	Baseline: April 1, 2018 – March 31, 2019 PCRs entered = 2,305,119 % of PCRs that were Version 3.4 = 97.024%
Date and Current Value for the Measure	Current: April 1, 2019 - March 31, 2020 PCRs entered: 2,899,241 (2,586,964 events occurred in the timeframe) % of PCRs that were Version 3.4 = 100%
Regional Reviewer's Conclusion	**Check one** **___Measurable performance improvement *has* been documented** **___Measurable performance improvement has *not* been documented** **___Not sure**
If "has not" or "not sure": What remedial guidance have you given the State?	
Comments	

Georgia GEMSIS Reporting Completeness

2012-2013 (V2 only)		2013-2014 (V2 only)		2014-2015 (V2 only)	
Month	GEMSIS (V2)	Month	GEMSIS (V2)	Month	GEMSIS (V2)
April	134,404	April	146,045	April	154,690
May	137,942	May	148,949	May	161,934
June	134,040	June	134,705	June	158,167
July	133,787	July	144,508	July	159,520
August	136,672	August	143,388	August	162,577
September	121,543	September	137,091	September	160,819
October	134,388	October	144,368	October	167,274
November	130,972	November	142,718	November	165,844
December	134,741	December	147,946	December	172,578
January	156,923	January	155,196	January	177,631
February	133,340	February	134,401	February	161,491
March	153,133	March	154,477	March	181,866
TOTAL	**1,641,885**	TOTAL	1,733,792	TOTAL	1,984,391
Percent	**100.00%**	**Percent**	100.00%	**Percent**	100.00%

	2015-2016				2016-2017		
Month	GEMSIS (V2)	GEMSIS Elite (V3)	Total	Month	GEMSIS (V2)	GEMSIS Elite (V3)	Total
April	178,444		178,444	April	186,508	3	186,511
May	182,376		182,376	May	192,801	0	192,801
June	175,124		175,124	June	189,173	3	189,176
July	183,545		183,545	July	191,773	5	191,778
August	177,046		177,046	August	205,104	6	205,110
September	174,483	1	174,484	September	193,243	106	193,349
October	179,239	1	179,240	October	195,336	542	195,878
November	169,025	1	169,026	November	188,481	3,268	191,749
December	177,807	0	177,807	December	191,912	3,406	195,318
January	178,923	4	178,927	January	199,269	3,191	202,460
February	175,978	1	175,979	February	177,405	3,617	181,022
March	191,470	4	191,474	March	196,108	4,637	200,745
TOTAL	2,143,460	12	2,143,472	TOTAL	2,307,113	18,784	2,325,897
Percent	99.999%	0.001%		**Percent**	99.192%	0.808%	

2017-2018

Month	GEMSIS (V2)	GEMSIS Elite (V3)	Total
April	180,200	4,439	184,639
May	194,400	4,701	199,101
June	178,661	5,000	183,661
July	183,772	4,467	188,239
August	190,134	4,911	195,045
September	181,363	6,153	187,516
October	184,475	6,879	191,354
November	174,889	7,789	182,678
December	158,613	12,230	170,843
January	141,677	37,360	179,037
February	100,807	55,053	155,860
March	78,870	74,647	153,517
TOTAL	1,947,861	223,629	2,171,490
Percent	89.702%	10.298%	

2018-2019

Month	GEMSIS (V2)	GEMSIS Elite (V3)	Total
April	24,212	138,921	163,133
May	17,878	167,433	185,311
June	17,264	182,819	200,083
July	8,399	188,890	197,289
August	303	201,284	201,587
September	184	176,182	176,366
October	168	183,058	183,226
November	162	182,150	182,312
December	31	203,064	203,095
January	5	204,272	204,277
February	2	194,074	194,076
March	2	214,362	214,364
TOTAL	68,610	2,236,509	2,305,119
Percent	2.976%	97.024%	

2019-2020

Month	GEMSIS (V2)	GEMSIS Elite (V3)	Total
April	0	212,932	212,932
May	0	224,189	224,189
June	0	208,694	208,694
July	0	217,258	217,258
August	0	222,479	222,479
September	0	216,385	216,385
October	0	218,384	218,384
November	0	205,652	205,652
December	0	219,402	219,402
January	0	220,345	220,345
February	0	208,191	208,191
March	0	213,053	213,053
TOTAL	0	2,586,964	2,586,964
Percent	0.00%	100.00%	

Section 405c Quantitative Progress Report – Special Study

State: GA Report Date: 6/1/2020 Submitted by: D. Newton

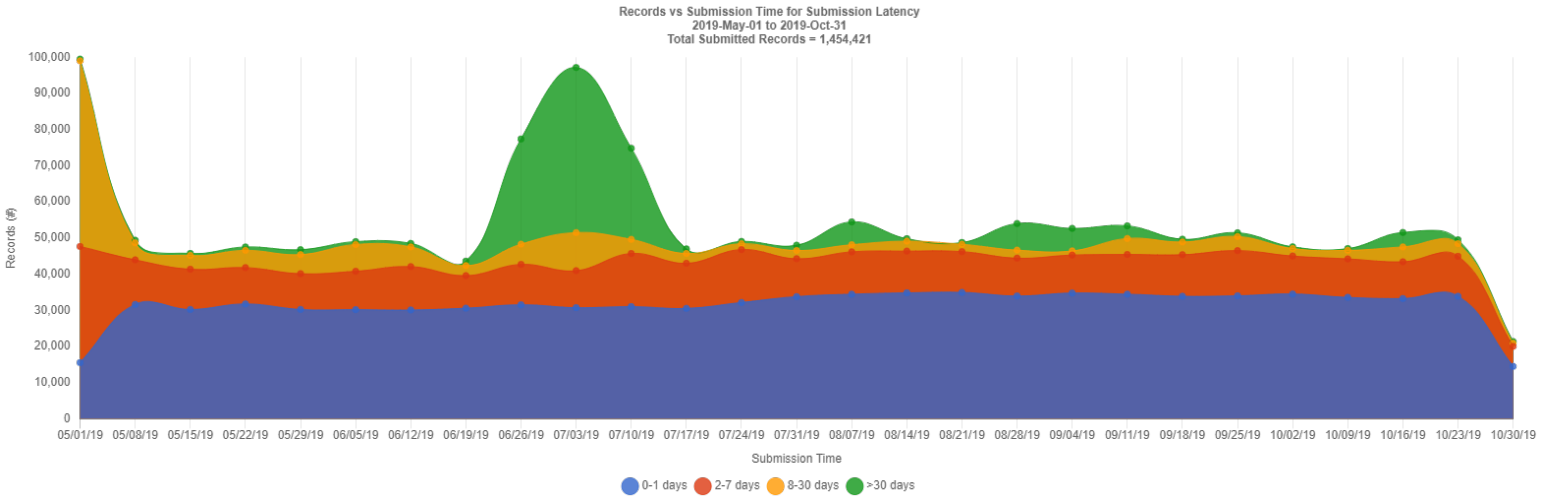
Regional Reviewer:

System to be Impacted	**____CRASH ___DRIVER ____VEHICLE ____ROADWAY ____CITATION/ADJUDICATION __X__EMS/INJURY OTHER specify:**
Performance Area(s) to be Impacted	**____ACCURACY __X__TIMELINESS ____COMPLETENESS ____ACCESSIBILITY ____UNIFORMITY ____INTEGRATION OTHER specify:**
Performance Measure used to track Improvement(s)	**Narrative Description of the Measure** Timeliness of EMS data is extremely important. **There will be a decrease in the latency of records being submitted to GEMSIS Elite and from GEMSIS Elite to Biospatial. Ideal latency for submission to Biospatial would be 24-36 hours.** NOTE: Data transmission to Biospatial began in November of 2018, therefore there has not been 2 full years of transmission. From November 2018 to April of 2018, the submissions to Biospatial were playing catch up, submitting 1,597,212 historical records. The historical records were caught up in May of 2019, so there is only usable comparisons that begin May 1, 2019. So there will be a baseline of the first 6 months from May 1, 2019 – October 31, 2019, and that will be compared to November 1, 2019 – April 30, 2020. It is also important to understand that there are two types of EMS agencies in Georgia relative to data submission: 1. Those EMS agencies that use GEMSIS Elite directly, therefore their data is already in GEMSIS Elite, and their data is submitted to Biospatial within 8 hours of call being completed; and 2. Those EMS agencies that use their own software and submit data to GEMSIS Elite – these agencies have sometimes more of a latency due to the extra submission step before their data can be sent to Biospatial.
Relevant Project(s) in the State's Strategic Plan	**Title, number and strategic Plan page reference for each Traffic Records System improvement project to which this performance measure relates** GA-P-21, Enhancements to GEMSIS EMS Database OEMS GEMSIS Elite, FFY 2021 Georgia Traffic Records Strategic Plan, p.19
Improvement(s) Achieved or Anticipated	**Narrative of the Improvement(s)** ACHIEVED When comparing the baseline time frame (May 1, 2019 – October 31, 2019) to the comparison time frame (November 1, 2019 – April 30, 2019), **the ratio of "faster" records to "slower" records was increased from 4.01 in the baseline timeframe to 9.56 in the comparison time frame.**

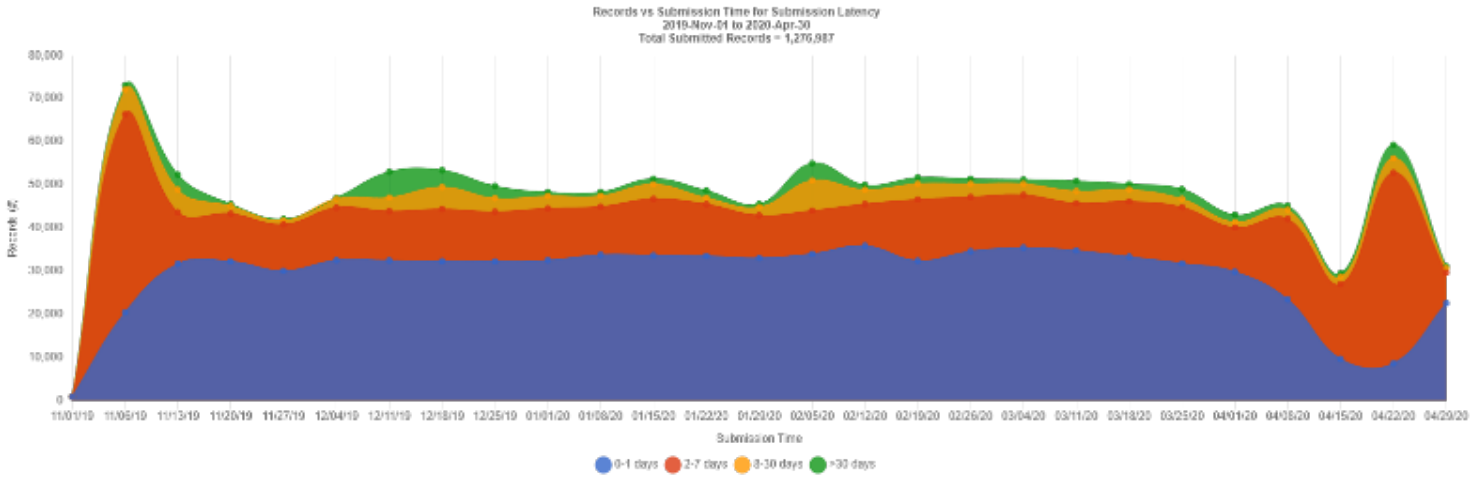
	When looking just at the "fastest" records, those with a latency of 0-1, there was an **increase in the percentage of the "fastest" records compared to the total for the timeframe from 58.10% in the baseline timeframe to 60.9% in the comparison timeframe.** When looking just at the "slowest" records, those with a latency of > 30 days, **there was a decrease in the percentage of the "slowest" records compared to the total for the timeframe from 9.8% in the baseline to just 3.5% in the comparison timeframe.** Therefore, there has been a reduction of the latency of EMS records from the baseline timeframe to the comparison timeframe given the following: • increase in the ratio of "faster" records to "slower" records • increase in the % of "fastest" records • decrease in the % of "slowest" records
Specification of how the Measure is calculated / estimated	**Narrative Description of Calculation / Estimation Method** The Biospatial Data Management Dashboard, Records vs Submission Time for Submission Latency widget will be examined. The comparison will be the 6 months of May 2019 – October 2019, compared to the 6 months of November 2019 – April of 2020. The time frame will be based on submission time. Latency is calculated based on the difference in event time (when the EMS run occurred) and submission time (when the EMS run data was submitted to Biospatial). The time frames for latency will be measured by month for each of the time periods (baseline and comparison), and the latencies will be placed into four categories for counting: 0-1 Days, 2-7 Days, 8-30 Days, and > 30 Days. These categories will be aggregated into two groups: • Group 1: Records with 0-1 OR 2-7 days latency ("faster") • Group 2: Records with 8-30 OR > 30 days latency ("slower") The ratio of Group 1/Group 2 will be used to gauge latency – it represents the ratio of "faster" submissions to "slower" submissions, and the higher the number (meaning that there are more records coming faster), means the better (or lower) the latency.
Date and Baseline Value for the Measure	**Baseline Time Frame: May 1, 2019 – October 31, 2019** TOTAL RECORDS: N = 1,454,421 Latency of 0-1 days: N = 845,042 ; % of total = 58.10% Latency of 2-7 days: N = 319,143 ; % of total = 21.94% Latency of 8-30 days: N = 147,187 ; % of total = 10.12% Latency of >30 days: N = 143,049 ; % of total = 9.84% Group 1: Records with 0-1 OR 2-7 days latency: N = 1,164,185 ; % of total = 80.04% Group 2: Records with 8-30 OR > 30 days latency: N = 290,236 ; % of total = 19.96% **Ratio of Group 1/2 = 4.01**
Date and Current Value for the Measure	**Comparison Time Frame: November 1, 2019 – April 30, 2020** TOTAL RECORDS: N = 1,276,987 Latency of 0-1 days: N = 778,092 ; % of total = 60.93% Latency of 2-7 days: N = 378,014 ; % of total = 29.60% Latency of 8-30 days: N = 76,103 ; % of total = 5.96% Latency of >30 days: N = 44,778 ; % of total = 3.51% Group 1: Records with 0-1 OR 2-7 days latency: N = 1,156,106 ; % of total = 90.53% Group 2: Records with 8-30 OR > 30 days latency: N = 120,881 ; % of total = 9.47% **Ratio of Group 1/2 = 9.56**

Regional Reviewer's Conclusion	**Check one** **___Measurable performance improvement *has* been documented** **___Measurable performance improvement has *not* been documented** **___Not sure**
If "has not" or "not sure": What remedial guidance have you given the State?	
Comments	

Baseline Data: May 1, 2019 – October 31, 2019 – Latency by Week



Comparison Data: November 1, 2019 – April 30, 2020 – Latency by Week



Baseline Data: May 1, 2019 – October 31, 2019 – Latency by Month

Latency	May-19		Jun-19		Jul-19		Aug-19		Sep-19		Oct-19		TOTAL Records	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
0-1 days "fastest"	134,651	47.8%	130,924	54.6%	138,528	49.6%	154,100	67.2%	145,426	66.8%	141,413	68.5%	845,042	58.1%
2-7 days	74,122	26.3%	45,635	19.0%	56,476	20.2%	49,557	21.6%	47,457	21.8%	45,896	22.2%	319,143	21.9%
8-30 days	69,088	24.5%	23,499	9.8%	18,817	6.7%	9,817	4.3%	13,284	6.1%	12,682	6.1%	147,187	10.1%
>30 days "slowest"	3,965	1.4%	39,841	16.6%	65,510	23.5%	15,792	6.9%	11,537	5.3%	6,404	3.1%	143,049	9.8%
TOTAL RECORDS	**281,826**	**100.0%**	**239,899**	**100.0%**	**279,331**	**100.0%**	**229,266**	**100.0%**	**217,704**	**100.0%**	**206,395**	**100.0%**	**1,454,421**	**100.0%**
Group 1: Records with 0-1 OR 2-7 days latency	208,773	74.1%	176,559	73.6%	195,004	69.8%	203,657	88.8%	192,883	88.6%	187,309	90.8%	1,164,185	80.0%
Group 2: Records with 8-30 OR > 30 days latency	73,053	25.9%	63,340	26.4%	84,327	30.2%	25,609	11.2%	24,821	11.4%	19,086	9.2%	290,236	20.0%
Ratio of Group 1 "faster" / Group 2 "slower"	**2.86**		**2.79**		**2.31**		**7.95**		**7.77**		**9.81**		**4.01**	

Comparison Data: November 1, 2019 – April 30, 2020 – Latency by Month

Latency	Nov-19		Dec-19		Jan-20		Feb-20		Mar-20		Apr-20		TOTAL Records	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
0-1 days	115,365	53.9%	143,389	64.1%	147,845	68.7%	141,930	66.1%	147,813	67.2%	81,750	43.1%	778,092	60.9%
2-7 days	79,746	37.3%	52,488	23.5%	51,773	24.1%	47,473	22.1%	53,585	24.4%	92,949	49.1%	378,014	29.6%
8-30 days	13,726	6.4%	14,818	6.6%	10,690	5.0%	17,340	8.1%	10,724	4.9%	8,805	4.6%	76,103	6.0%
>30 days	5,170	2.4%	13,108	5.9%	4,927	2.3%	7,826	3.6%	7,778	3.5%	5,969	3.2%	44,778	3.5%
TOTAL RECORDS	**214,007**	**100.0%**	**223,803**	**100.0%**	**215,235**	**100.0%**	**214,569**	**100.0%**	**219,900**	**100.0%**	**189,473**	**100.0%**	**1,276,987**	**100.0%**
Group 1: Records with 0-1 OR 2-7 days latency	195,111	91.2%	195,877	87.5%	199,618	92.7%	189,403	88.3%	201,398	91.6%	174,699	92.2%	1,156,106	90.5%
Group 2: Records with 8-30 OR > 30 days latency	18,896	8.8%	27,926	12.5%	15,617	7.3%	25,166	11.7%	18,502	8.4%	14,774	7.8%	120,881	9.5%
Ratio of Group 1 "faster" / Group 2 "slower"	**10.33**		**7.01**		**12.78**		**7.53**		**10.89**		**11.82**		**9.56**	