

# Oregon Traffic Records Strategic Plan

*Federal Fiscal Year 2023*

**December 2022**

*prepared for*

**Oregon Department of Transportation**

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# Table of Contents

- 1.0 Requirements for a Traffic Records Strategic Plan..... 1-1**
- 2.0 2020 Traffic Records Assessment..... 2-1**
- 3.0 Development of the Strategic Plan..... 3-3**
  - 3.1 Purpose of the Plan ..... 3-3
    - 3.1.1 Model Inventory of Roadway Elements (MIRE)..... 3-4
  - 3.2 Traffic Records Coordinating Committee..... 3-4
  - 3.3 Agencies Involved with Traffic Records Data Systems ..... 3-5
  - 3.4 Development Process of the Strategic Plan ..... 3-6
  - 3.5 Review of Traffic Records Assessment..... 3-7
  - 3.6 Stakeholder Input..... 3-7
    - 3.6.1 Stakeholder Interviews ..... 3-7
    - 3.6.2 Stakeholder Surveys..... 3-8
    - 3.6.3 Data Linkage Opportunities ..... 3-9
  - 3.7 Prioritizing and Setting Performance Measures ..... 3-9
- 4.0 Traffic Records Assessment and Prioritization ..... 4-1**
- 5.0 Demonstrated Achievement of the Quantitative Improvement in the Past Year..... 5-1**
- 6.0 Approved FFY 2023 TRCC Projects ..... 6-1**
- 7.0 Traffic Records Deficiencies and Performance Measures..... 7-0**



# List of Tables

Table 2.1 Traffic Records Assessment Priority Recommendations (2020)..... 2-2

Table 4.1 High Priority Assessment Findings..... 4-2

Table 7.1 Crash System ..... 7-0

Table 7.2 Roadway System..... 7-3

Table 7.3 Vehicle System ..... 7-5

Table 7.4 Driver System ..... 7-6

Table 7.5 Citation/Adjudication System..... 7-8

Table 7.6 Injury Surveillance System ..... 7-11



## 1.0 Requirements for a Traffic Records Strategic Plan

The Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act)<sup>1</sup> outline the requirements to qualify for the National Highway Traffic Safety Administration (NHTSA) Section 405 grants to improve a State's traffic records system. Traffic records are a key component in the effort to improve safety on the State's transportation system by allowing for the analysis of crash data to aid in the analysis, deployment, and evaluation of traffic safety countermeasures to move Oregon Toward Zero Deaths (TZD) on our roadways. The traffic records systems underpin the overall effort to make the maximum use of resources to improve safety.

The requirements found under 23 CFR § 1300.22 for inclusion in State Traffic Records Strategic Plans, which are addressed in this plan, are noted below:

1. Describes specific, quantifiable and measurable improvements anticipated in the State's core safety databases, including crash, citation or adjudication, driver, emergency medical services or injury surveillance system, roadway, and vehicle databases.
2. Includes a list of all recommendations from its most recent highway safety data and traffic records system assessment.
3. Identifies which such recommendations the State intends to implement and the performance measures to be used to demonstrate quantifiable and measurable progress.
4. For recommendations that the State does not intend to implement, provides an explanation.
5. Written description of the performance measures, and all supporting data, that the State is relying on to demonstrate achievement of the quantitative improvement in the preceding 12 months of the application due date in relation to one or more of the significant data program attributes.

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<sup>1</sup> As of November 2021, the Infrastructure Investment and Jobs Act is the current transportation legislation. However, the 2020 NHTSA Assessment was conducted under the FAST Act, so that is the primary reference for this strategic plan update.





## 2.0 2020 Traffic Records Assessment

In 2020, the Traffic Records Coordinating Committee (TRCC) requested and participated in a Traffic Records Assessment conducted by the National Highway Traffic Safety Administration (NHTSA) Technical Assessment Team. Similar to the Traffic Records Assessment conducted in 2016, the team measured how well Oregon's Traffic Records compared against the ideal as defined by the NHTSA through a series of questions and answers which are outlined in the [Traffic Records Program Assessment Advisory](#). The assessment examined each of the following traffic records modules:

- Traffic Records Coordinating Committee Management
- Strategic Planning
- Crash Data
- Vehicle Data
- Driver Data
- Roadway Data
- Citation / Adjudication Data
- EMS / Injury Surveillance Data
- Data Use and Integration

The Technical Assessment Team posed 328 questions to Oregon's traffic records stakeholders, and based on the answers provided, the state's traffic records system was rated as meeting the ideal, partially meeting the ideal, or not meeting the ideal.

In summary, out of the 328 assessment questions, Oregon met the Advisory ideal for 145 questions (44%), partially met the Advisory ideal for 58 questions (18%) and did not meet the Advisory ideal for 125 questions (38%). The percentages for each assessment module for meeting the ideal are illustrated in Figure 1.

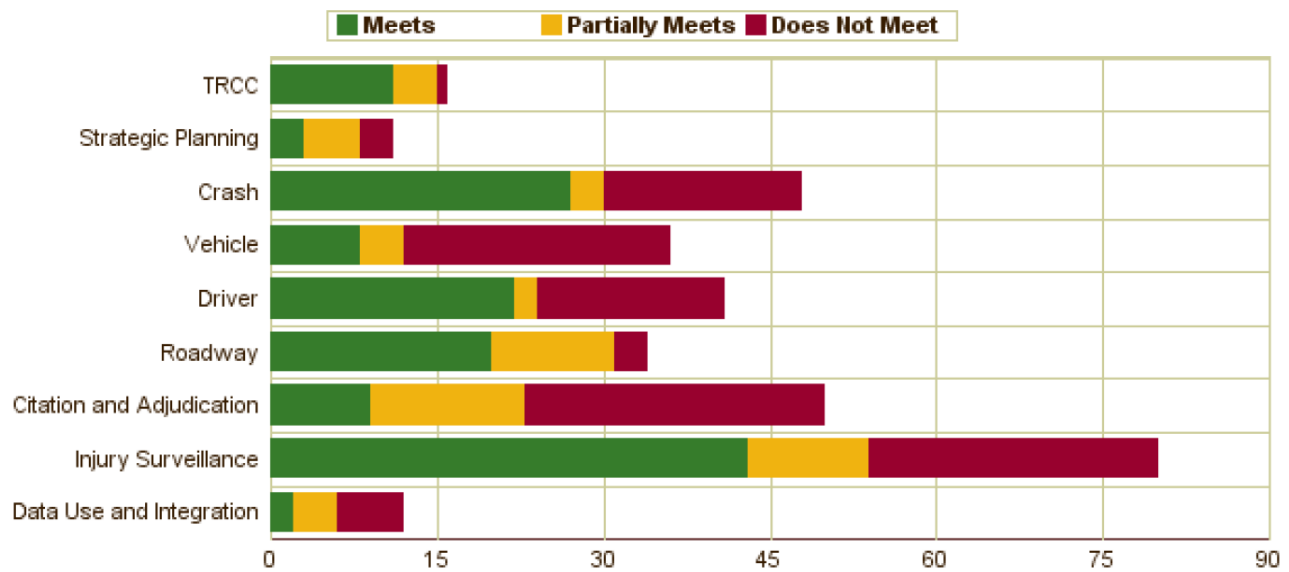


Figure 2.1. Rating Distribution by Module (NHTSA Traffic Records Assessment, Oregon, 2020)

It is important to note that no state can currently achieve 100 percent of NHTSA’s ideal standard. Reaching full compliance with the ideal is considered a stretch goal to work towards.

According to 23 CFR § 1300.22, States are required to list the recommendations from its most recent traffic records assessment and an explanation of how the State intends to address each recommendation. Table 2.1 summarizes the NHTSA’s recommendations from the assessment and Oregon’s response.

**Table 2.1 Traffic Records Assessment Priority Recommendations (2020)**

Data System <sup>2</sup>	Recommendations to Reflect Best Practices Identified in the Traffic Records Program Assessment Advisory	Oregon FFY2023 Response
Crash	Improve the interfaces with the Crash data system.	Oregon has developed and published a plan for Crash data system improvement. <b>2023.</b> A project has been developed to establish online crash reporting. Integration is not a priority in FFY 2023 and the TRCC plans to address this in future years.
	Improve the data quality control program for the Crash data system.	Oregon has developed and published a plan for Crash data system improvement. <b>2023.</b> A project has been developed to establish online crash reporting, increasing from no citizen electronic/online crash reporting.
Vehicle	Improve the applicable guidelines for the Vehicle data system.	Oregon has taken steps to modernize its vehicle record system to meet the guidelines for vehicle data systems. <b>2023.</b> Oregon will continue implementing database modernization.
	Improve the data dictionary for the Vehicle data system.	Oregon has taken steps to modernize its vehicle record system to meet the guidelines for vehicle data systems. <b>2023.</b> Oregon will continue implementing database modernization and seek a mechanism to share the resulting data dictionary.
	Improve the data quality control program for the Vehicle data system.	Oregon has taken steps to modernize its vehicle record system to meet the guidelines for vehicle data systems. <b>2023.</b> This is not a priority in FFY 2023 and the TRCC plans to address this in future years
	Improve the interfaces with the Vehicle data system.	Oregon has taken steps to modernize its vehicle record system to meet the guidelines for vehicle data systems. <b>2023.</b> No work is planned in this area. Many of the guidelines will be addressed as the Driver system is fully implemented; the assessment team acknowledged this during the report out meeting.
Driver	Improve the data dictionary for the Driver data system.	Oregon has taken steps to modernize its driver records system working to meet the guidelines for driver data systems. <b>2023.</b> Oregon will continue implementing database modernization and seek a mechanism to share the resulting data dictionary.
	Improve the data quality control program for the Driver data system.	Oregon has taken steps to modernize its driver records system to meet the guidelines for vehicle data systems.

<sup>2</sup> The following areas did not receive Priority Recommendations: Traffic Records Coordinating Committee, Strategic Planning, and Data Use and Integration.

Data System <sup>2</sup>	Recommendations to Reflect Best Practices Identified in the Traffic Records Program Assessment Advisory	Oregon FFY2023 Response
		<b>2023.</b> No work is planned in this area. Many of the guidelines will be addressed as the Driver system is fully implemented; the assessment team acknowledged this during the report out meeting
Roadway	Improve the applicable guidelines for the Roadway data system.	Oregon has taken steps to modernize its roadway records system to meet the guidelines for roadway data systems. <b>2023.</b> Efforts (non-NHTSA) are planned to continue modernization process of the roadway data system to meet guidelines.
	Improve the data quality control program for the Roadway data system.	Oregon has taken steps to modernize its roadway records system to meet the guidelines for roadway data systems. <b>2023.</b> Efforts (non-NHTSA) are planned to continue modernization process of the roadway data system to meet guidelines.
Citation/ Adjudication	Improve the data dictionary for the Citation and Adjudication systems.	Oregon will continue to work to improve Citation and Adjudication systems to bring them closer to conformity with the Traffic Records Assessment Advisory. <b>2023.</b> Adjudication and Citation data dictionaries were not available to present to the assessment team. Oregon will work to find a way to offer screen prints or some other way to transmit this information for future assessments.
	Improve the data quality control program for the Citation and Adjudication systems.	Oregon will continue to work to improve Citation and Adjudication systems to bring them closer to conformity with the Traffic Records Assessment Advisory. <b>2023.</b> Oregon is funding a project to improve citation database records through a racial profiling database that concurrently tracks traffic citations.
Injury Surveillance	Improve the data quality control program for the Injury Surveillance systems.	Oregon will continue to work to improve the data quality control program as articulated in the best practices outlined in the Traffic Records Assessment Advisory. <b>2023.</b> Oregon is providing data input devices to improve data timeliness, accuracy, and completeness for the NEMSIS database.

## 3.0 Development of the Strategic Plan

### 3.1 Purpose of the Plan

The purpose of this document is to provide the Oregon Traffic Records Coordinating Committee (TRCC), the ODOT Transportation Safety Division (TSD), and other traffic safety stakeholders of the State of Oregon with a Strategic Plan for Traffic Records Improvements. This plan is directed primarily at actions that the TRCC can help accomplish through its membership while pursuing the goal of improving traffic records. As such, it touches on the activities of all stakeholder agencies within the State, but it does not represent an attempt to set those agencies' agendas. Rather, it is an attempt to help the TRCC fulfill a broad role of communication, coordination, and assistance among collectors, managers, and users of these data in Oregon. To assist with

this effort a consultant was procured to aid in the coordination, organization, and drafting of this Strategic Plan.

This plan is based on the findings and recommendations documented in the 2016 Traffic Records Assessment and the information provided by the State to the project team. Drawing on the knowledge and expertise of the TRCC members, they were closely involved in the development of this plan to consider the findings and develop a comprehensive data-driven approach to traffic records.

### 3.1.1 Model Inventory of Roadway Elements (MIRE)

Oregon continues to develop plans for improvement of collection of missing or deficient data elements from local agencies currently not collected for the MIRE Fundamental Data Elements (FDE) on all public roads, working toward the 2026 deadline. Oregon has noted it does not have budget or staff to fully meet this advisory ideal. The State provided a MIRE 2.0 FDE for Intersection ID during the second round, indicating its desire to work toward meeting the advisory Ideal.

## 3.2 Traffic Records Coordinating Committee

Following is the list of Oregon TRCC membership as of October 1, 2022.

Name	System	Email	Title	Member Status
Walter McAllister	None	<a href="mailto:Walter.J.MCALLISTER@odot.oregon.gov">Walter.J.MCALLISTER@odot.oregon.gov</a>	Traffic Records Program Manager	Non-Voting
Nick Fortey	None	<a href="mailto:nick.fortey@fhwa.dot.gov">nick.fortey@fhwa.dot.gov</a>	Regional Representative	Non-Voting Member
Mari Hembeck	None	<a href="mailto:mari.hembeck@dot.gov">mari.hembeck@dot.gov</a>	Regional Representative	Non-Voting Member
Lt. Nathan House	Citation Data System	<a href="mailto:nathan.house@state.or.us">nathan.house@state.or.us</a>	Lieutenant, Patrol Svcs Division	Voting Member (Law Enforcement)
Rod Kamm	GIS Data System	<a href="mailto:Rod.KAMM@odot.oregon.gov">Rod.KAMM@odot.oregon.gov</a>	ODOT Information Systems	Voting Member (Information Systems)
Chris Wright	Crash Data System	<a href="mailto:Chris.WRIGHT@odot.oregon.gov">Chris.WRIGHT@odot.oregon.gov</a>	Transportation Data Section Manager	Voting Member (Traffic Data)
Jess Brown	None	<a href="mailto:Jess.E.BROWN@odot.oregon.gov">Jess.E.BROWN@odot.oregon.gov</a>	Manager, Investigations, Safety & Federal Programs	Voting Member (Motor Carrier)
Dagan Wright	Injury Surveillance Data System	<a href="mailto:DAGAN.A.WRIGHT@dhsosha.state.or.us">DAGAN.A.WRIGHT@dhsosha.state.or.us</a>	EMS and Trauma Systems	Voting Member (Public Health, Injury Control)

Linda Beuckens	Driver License / History Data System	<a href="mailto:Linda.K.BEUCKENS@odot.oregon.gov">Linda.K.BEUCKENS@odot.oregon.gov</a>	Program Services Group Manager	Voting Member (Driver and Motor Vehicles)
Traci Pearl	(SHSO)	<a href="mailto:Traci.PEARL@odot.oregon.gov">Traci.PEARL@odot.oregon.gov</a>	Transportation Safety Manager	Voting Member (Highway Safety)
Joseph Marek, PE, PTOE	Roadway Data System	<a href="mailto:joem@co.clackamas.or.us">joem@co.clackamas.or.us</a>	Traffic Engineer, Clackamas County	Voting Member, Chair (Local County Traffic Engineering)
Jovi Anderson	Local Government	<a href="mailto:janderson@ci.bend.or.us">janderson@ci.bend.or.us</a>	Program Technician, Bend	Voting Member (Local Government)
Angela Kargel	Roadway Data System	<a href="mailto:Angela.J.KARGEL@odot.oregon.gov">Angela.J.KARGEL@odot.oregon.gov</a>	State Traffic Services Engineer	Voting Member (Highway Infrastructure)

### 3.3 Agencies Involved with Traffic Records Data Systems

Agencies and organizations recognized in this plan as being vested with a responsibility for transportation safety include:

- **Community Groups** – responsible for accomplishing local traffic safety objectives.
- **Oregon Health Authority (OHA) Public Health Division** – responsible for collecting and managing information that describes incidences of trauma occurring within the state.
- **Federal Highway Administration (FHWA)** – provides financial resources and technical assistance to state and local governments for planning, designing, constructing, preserving, and improving the National Highway System and urban and rural roads that are not on the System, but that are eligible for Federal-aid.
- **Federal, State, and Local Traffic Engineering Agencies** – responsible for the roadways and traffic operations within their jurisdictions.
- **The Judicial System** – responsible for the adjudication of traffic offenses at both the state and local level.
- **Local Law Enforcement Agencies** – enforce traffic laws and regulations at the local level.
- **Medical Examiners and Coroners** – add to the understanding of the factors contributing to fatal injuries suffered in motor vehicle crashes.

- **Metropolitan Planning Organizations** – responsible for addressing traffic safety planning and project programming issues within designated areas of the state.
- **National Highway Traffic Safety Administration (NHTSA)** – responsible for preventing injuries and reducing economic costs due to traffic crashes at the national level.
- **Oregon Department of Transportation (ODOT)** – responsible for crash and roadway data collection, coding, statistical reporting, overall management of statewide, commercial vehicle, FARS crash data systems, planning, designing, constructing, and maintaining the roadway infrastructure.
- **ODOT Driver and Motor Vehicle Services, Driver Programs** – licenses drivers and maintains driver records, including conviction, insurance and accident verification reporting.
- **ODOT Driver and Motor Vehicle Services, Vehicle Programs** – issues titles and registers vehicles, maintains vehicle title and registration information.
- **ODOT Motor Carrier Division** – responsible for oversight of commercial motor carriers operating within the State.
- **ODOT Transportation Safety Division** – responsible for traffic safety program management, problem identification, and countermeasure grant funding.
- **Oregon State Police** – responsible for enforcing laws on state highways.
- **Trauma Care Providers** – physicians, hospitals, emergency medical services, and long-term care providers who treat persons injured in motor vehicle crashes.

### 3.4 Development Process of the Strategic Plan

The recommendations contained in this strategic plan are the result of a systematic review of Oregon's existing traffic records system components and interviews with those persons knowledgeable in their use and operation. These findings have been combined with the TRCC's knowledge of traffic records concepts and contemporary approaches to traffic safety to produce this strategic plan. The purpose of the traffic records review was to update knowledge of Oregon's:

- Compliance with recommended standards, practices, and Federal guidelines.
- Efficiency and effectiveness of data processing, information exchange, and existing technology.
- Ability to support highway safety program management with timely and accurate traffic records information.

This strategic plan includes a synthesis by the review team of information derived from the following sources:

- Stakeholder surveys that received a total of 75 responses from traffic records data collectors, users, and system managers (conducted April-May 2022).
- Interviews with 18 data collectors, users, and system managers of traffic records data throughout the state (conducted May-June 2022).

- 2020 Traffic Records Assessment Report (findings presented January 2021)
- System documentation for the various data systems identified.
- Recommended practices and standards promulgated by various Federal agencies and professional organizations involved in transportation, highway safety, and traffic records.
- Technical expertise of the project team itself in the definition, development, and use of traffic records to support national, state, and local highway and traffic safety applications.
- Knowledge and expertise of TRCC membership.

### 3.5 Review of Traffic Records Assessment

Led by the consultant, members of the TRCC organized a thorough review of the 2020 Traffic Records Assessment report completed in the State. Additionally, a review was conducted of the Traffic Records Strategic Plan, FFY 2022 Highway Safety Plan (HSP), Oregon Transportation Plan, Rail Plan, Bicycle and Pedestrian Safety Plan, Oregon EMS Data Strategic Plan, and the 2021 Oregon Traffic Safety Action Plan to review and compile all data related performance measures noted in various statewide plans and relevant local plans. From this a Traffic Records Assessment priorities and current performance measures matrix was developed.

The consultant reviewed and analyzed these documents for all items related to traffic records data sources, users of the data, collectors of the data, and data related performance measures. The analysis by the consultant helped coordinate the various traffic records data performance measures across a variety of statewide plans into the new Traffic Records Strategic Plan. This review helped to integrate various statewide and local data needs and goals into the final report. The consultant then consolidated and synthesized these items into a single spreadsheet matrix to aid in the development of the Traffic Records Strategic Planning process.

### 3.6 Stakeholder Input

There are three general categories of stakeholders: data users (includes local governments and Metropolitan Planning Organizations), data collectors (law enforcement, hospitals that provide emergency services, DMV, for example) and data system managers (primarily ODOT, OHA).

#### 3.6.1 Stakeholder Interviews

Members for each of these priority categories were interviewed for every data system (crash, vehicle, driver, roadway, citation/adjudication, injury surveillance) outlined in the Assessment. This also served as another opportunity to integrate the needs of traffic data stakeholders across the State. The following is a listing of the stakeholders interviewed for this process and the data system(s) they represented:

- Walt McAllister, Traffic Records Program Manager, Traffic Records Management and Strategic Planning
- Nick Fortey, FHWA Oregon Division, TRCC and Strategic Planning
- Chris Wright, ODOT Transportation Data Section, Crash and Data Integration

- Rod Kamm, ODOT Information Systems; Crash, Roadway, Vehicle, Driver, and Data Integration
- Joseph Marek, Clackamas County, Crash and Roadway
- Christina McDaniel-Wilson, ODOT Traffic-Roadway, Crash and Roadway
- Coral Smith, OSP, Citation/Adjudication
- Eric Gemmil, OSP, Citation/Adjudication
- Evan Sether, OSP, Citation/Adjudication
- Ken Sanchagrin, OSP, Citation/Adjudication
- Patricia Bauer, OSP, Citation/Adjudication
- Kimberly Rose, OJD, Citation/Adjudication
- James Skinner, NHTSA Region 10, Citation/Adjudication, Vehicle, and Driver
- Linda Beuckens, DMV, Vehicle and Driver
- Jess Brown, ODOT Commerce & Compliance, Vehicle and Driver
- Josh Roll, ODOT Research, Strategic Planning and Data Integration
- Phillip Kase, ODOT Performance, Strategic Planning and Data Integration
- Dagan Wright, EMS Trauma Systems, Injury Surveillance

Using the TRCC as the connection to stakeholders who collect and report crash data and to those who manage data systems, the consultant developed an interview framework to get the opinions and priorities of the TRCC stakeholders regarding their use of the data and the strengths, weaknesses, opportunities, and challenges with current traffic data systems. Survey results were compiled, analyzed, and documented by the consultant to inform this update.

### 3.6.2 Stakeholder Surveys

The consultant support team developed two surveys for these traffic records-focused audiences:

1. **Broad survey** to be distributed to relevant stakeholders across the state, TRCC, data users and managers that asks basic questions about the data they use, what data they wish they had, any issues with the current data or structures, and their satisfaction with the six different data systems regarding data quality, timeliness, accessibility, and integration.
2. **Specific survey** for the Traffic Records Coordinating Committee (TRCC) that focuses more on the key recommendations that came out of the Assessment report for each of the six data systems. The point of the survey is to gauge what recommendations to them are most important to tackle and prioritize from the Assessment report.



The surveys asked respondents about their role(s) related to traffic records (e.g., data user, collector, system manager, etc.) to seek their opinions and priorities for use and improvements to traffic records data. Overall, the survey was successful in reaching a broad range of stakeholders. Combined, the surveys resulted in 75 responses. Participants included Tribal, Federal, State, and local government agencies, including local law enforcement.

Survey results included the following topics and focus areas:

- The crash data system was considered the most used and the most important to stakeholder respondents, followed by roadway inventory, vehicles, and health/injury outcomes.
- Timeliness is a primary concern for all data systems. Many stakeholder respondents were dissatisfied with the timeliness of the data sources they use.
- Stakeholder respondents found the crash data system the most accessible, and the citation data system the least so.
- TRCC member respondents agreed that it is important to survey data users to inquire about training and technical assistance needs.

Results of the survey are incorporated into this TRSP update and will be used to develop an Oregon Traffic Records Implementation Work Plan to ensure completion and tracking of related activities.

### 3.6.3 Data Linkage Opportunities

Based on information gained in the interviews the consultant looked for opportunities for data linkages across the various traffic records data platforms that exist across the State. The consultant also looked for ways of enhancing the retrieval, downloading, and sharing of the various traffic records systems data with the appropriate stakeholders. Future plans for upgrading data system(s) across the State were also discussed to determine opportunities for enhanced data integration across various traffic record data platforms.

## 3.7 Prioritizing and Setting Performance Measures

The data system stakeholders reviewed all findings from the assessment rated as *does not meet* or *partially meets* in the developed matrix to prioritize the findings as high, medium, or low priority for the Traffic Records Strategic Plan. Based on the comments in the interviews assessment findings were categorized as either: high priority/ accomplishments possible in the near future, mid priority/ accomplishments possible within the next five years and/or possible after other questions rated as a high priority are accomplished, and low priority/ accomplishments possible in distant future. Section 4 breaks down the assessment findings prioritization based on these stakeholder discussions. The TRCC reviewed and prioritized recommendations from the NHTSA 2020 assessment that will lead to actions in subsequent years.

The data system stakeholders and the TRCC were consulted in the development of Performance Measures. The consultant worked with the traffic records data system stakeholders in the development of quantitative performance measures, action steps, and leaders to develop traffic records improvement strategies rated as very important.



## 4.0 Traffic Records Assessment and Prioritization

The following Section outlines the Traffic Records Assessment findings and their prioritization.

**Table 4.1 High Priority Assessment Findings**

Assessment Question	Rating	Assessor Conclusion	Leader
<b>Crash</b>			
Does the crash system interface with the driver system?	Does Not Meet	The crash system does not interface with the driver system. However, they do have the capability to link data through the use of a common accident record number.	Chris Wright
Does the crash system interface with the vehicle system?	Does Not Meet	The crash system does not interface with the vehicle system.	Chris Wright
Does the crash system interface with the citation and adjudication systems?	Does Not Meet	The State does not currently have an interface between the citation and adjudication systems.	Chris Wright
Does the crash system have an interface with EMS?	Does Not Meet	The State's crash system does not interface with the EMS records. However, raw crash data has been provided to the injury surveillance system users for the purpose of integration and evaluation.	Chris Wright
Are there formally documented processes for returning rejected crash reports to the originating officer and tracking resubmission of the report in place?	Does Not Meet	The State does not have a formal process for returning rejected crash reports. Reports are reviewed by crash technicians and any locations errors or omissions that are identified are corrected by them.	Chris Wright
Does the State track crash report changes after the original report is submitted by the law enforcement agency?	Does Not Meet	No process was described for tracking of changes to original crash reports.	Chris Wright
Are there timeliness performance measures tailored to the needs of data managers and data users?	Does Not Meet	Expectations are noted but no performance measures have been established. The five-year business plan presented speaks to expectation and timeliness, however, there has been no implementation yet.	Chris Wright
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have documented completeness performance measures.	Chris Wright
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	No specific uniformity performance measures were provided.	Chris Wright
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have documented integrated performance measures.	Chris Wright
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have any documented accessibility performance measures.	Chris Wright
Has the State established numeric goals-performance metrics-for each performance measure?	Does Not Meet	The State's Traffic Records Strategic Plan does not have any established numeric goals or performance metrics for any performance measures.	Chris Wright

Assessment Question	Rating	Assessor Conclusion	Leader
Is there performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency?	Does Not Meet	Despite overall strengths and weaknesses being communicated, there is no performance reporting feedback provided to law enforcement.	Chris Wright
Are quality control reviews comparing the narrative, diagram, and coded contents of the report considered part of the statewide crash database's data acceptance process?	Does Not Meet	The State does not utilize a quality control process that analyzes the narrative, diagram, and coded contents to improve the data quality.	Chris Wright
Are sample-based audits periodically conducted for crash reports and related database content?	Does Not Meet	The State does not conduct sample-based audits of the crash database.	Chris Wright
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	Data quality reports are not provided to the TRCC for review.	Chris Wright
<b>Vehicle</b>			
Does the vehicle system provide title information data to the National Motor Vehicle Title Information System (NMVTIS) at least daily?	Does Not Meet	The Oregon driver system is reported to provide real-time updates of title information to NMVTIS but provided no information regarding the manner of transmittal. Without that documentation, it is not possible to make an appropriate assessment.	Linda Beuckens
Does the vehicle system query NMVTIS before issuing new titles?	Does Not Meet	The Oregon response indicates that MNVTIS queries are made prior to a new title being released from the title review queue but failed to provide any documentation or a brief narrative description of the process for the assessors to make an appropriate assessment of this item.	Linda Beuckens
Does the State incorporate brand information recommended by AAMVA and/or received via NMVTIS on the vehicle record, whether the brand description matches the State's brand descriptions?	Does Not Meet	Oregon does not incorporate brand information recommended by AAMVA and/or received via NMVTIS on the vehicle record, but the DMV adheres to its established title brand guidelines and carries forward the brands issued by other States when titling out-of-state vehicles.	Linda Beuckens
Does the State participate in the Performance and Registration Information Systems Management (PRISM) program?	Does Not Meet	Oregon does not participate in the Performance and Registration Information Systems Management (PRISM) program.	Linda Beuckens
Does the vehicle system have a documented definition for each data field?	Partially Meets	The Oregon vehicle system is not reported to be supported by a data dictionary. Data elements are documented in the processing procedures. No documentation of data elements or an excerpt of procedures was provided.	Linda Beuckens
Does the vehicle system include edit check and data collection guidelines that correspond to the data definitions?	Does Not Meet	Oregon vehicle system data entry processing quality is reportedly obtained through system field lookup tables and field data constraints. However, other additional information or documentation was provided.	Linda Beuckens

Assessment Question	Rating	Assessor Conclusion	Leader
Are the collection, reporting, and posting procedures for registration, title, and title brand information formally documented?	Does Not Meet	Oregon vehicle system processes are reportedly documented in title and registration manuals, processing service group procedural manuals, training materials, and other publications. However, no evidence was provided to substantiate that this system documentation.	Linda Beuckens
Are the driver and vehicle files unified in one system?	Partially Meets	Oregon vehicle and driver files were unified into a single data system in July 2020. However, no information was provided documenting the unified system's main components and variables that link the vehicle and driver files.	Linda Beuckens
Is personal information entered into the vehicle system using the same conventions used in the driver system?	Does Not Meet	The response indicated that personal information is entered into the vehicle system using the same conventions as those in the driver system but fails to provide any of the required documentary evidence or a narrative description to accurately assess this item.	Linda Beuckens
When discrepancies are identified during data entry in the crash data system, are vehicle records flagged for possible updating?	Does Not Meet	Vehicle record discrepancies identified during data entry in the crash data system are not flagged for possible updating.	Linda Beuckens
Is the vehicle system data processed in real-time?	Does Not Meet	The response indicates that the registrations and titles are processed in a real-time environment but did not provide any of the required documentary evidence or a narrative description to accurately assess this item.	Linda Beuckens
Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?	Does Not Meet	The Oregon vehicle system reportedly contains valid field lookup tables and data type constraints to control the data entry process. However, no documentation or narrative description evidence was provided.	Linda Beuckens
Are statewide vehicle system staff able to amend obvious errors and omissions for quality control purposes?	Does Not Meet	The Oregon DMV is reported to have a title check process as part of title data entry. However, no information regarding the title check process and describing who is authorized to make corrections and the scope of the error correction abilities was provided.	Linda Beuckens
Are there timeliness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by timeliness performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by accuracy performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by completeness performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by uniformity performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens

Assessment Question	Rating	Assessor Conclusion	Leader
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by integration performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon Vehicle system is not supported by accessibility performance measures tailored to the needs of data managers and data users as a component of a comprehensive data quality management program.	Linda Beuckens
Has the State established numeric goals-performance metrics-for each performance measure?	Does Not Meet	The Oregon Vehicle system is not supported by established performance measures and no baseline metrics have been set.	Linda Beuckens
Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?	Does Not Meet	The response indicating that feedback is provided to employees does not provide the assessors with pertinent information. This item is asking if there is a formal procedure for detecting and evaluating high frequency that drive system or operational changes or improvements. No information was provided describing a process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, or prompt form revisions.	Linda Beuckens
Are sample-based audits conducted for vehicle reports and related database contents for that record?	Partially Meets	Oregon indicated that sample-based audits are not conducted across the board for vehicle reports and related database contents. However, sample audits are performed on vehicle records related to legislative changes to monitor and provide feedback and to ensure that staff understand how the work needs to be done differently.	Linda Beuckens
Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions within the State?	Does Not Meet	The Oregon vehicle system is not supported by periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions within the State.	Linda Beuckens
Is data quality feedback from key users regularly communicated to data collectors and data managers?	Does Not Meet	The response did not provide the assessors with enough information to rate this item. No information documenting a process for transmitting and using key users' data quality feedback to inform changes was provided.	Linda Beuckens
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	Oregon vehicle system data quality reports are not provided to the TRCC for their review.	Linda Beuckens
<b>Driver</b>			
Are the contents of the driver data system documented with data definitions for each field?	Does Not Meet	The Oregon driver system is reported to be supported by a comprehensive data dictionary documenting the data definitions for each field including null codes, but no supporting documentation was provided to demonstrate the contents of a data dictionary.	Linda Beuckens
Are all valid field values-including null codes-documented in the data dictionary?	Does Not Meet	The Oregon driver system is reported to be supported by a comprehensive data dictionary documenting the data definitions for each field including null codes, but no supporting documentation was provided to demonstrate the contents of a data dictionary.	Linda Beuckens

Assessment Question	Rating	Assessor Conclusion	Leader
Are there edit checks and data collection guidelines for each data element?	Does Not Meet	The Oregon driver system is reported to be supported by a comprehensive data dictionary documenting the data definitions for each field including null codes and edit checks, but no supporting documentation was provided to demonstrate the contents of a data dictionary.	Linda Beuckens
Is there guidance on how and when to update the data dictionary?	Does Not Meet	The Oregon driver system is reported to be supported by a comprehensive data dictionary documenting the system functionality and that the dictionary is updated concurrent with system changes. No further information or documentation was provided to enable the assessors to evaluate the effectiveness of this item.	Linda Beuckens
Is there a formal, comprehensive data quality management program for the driver system?	Does Not Meet	The State indicated that the data quality is much improved with the new system (OLIVR). It is programmed to increase data quality and reject non-compliant data. However, the Oregon driver system is not yet supported by a formal, comprehensive data quality management program.	Linda Beuckens
Are there timeliness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon driver system is not supported by established timeliness performance measures tailored to the needs of data managers and data users that would be a component of a comprehensive data quality management program.	Linda Beuckens
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon driver system is not supported by established accuracy performance measures tailored to the needs of data managers and data users that would be a component of a comprehensive data quality management program.	Linda Beuckens
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	It was reported that the system uses work queues for work such as proofing notices of suspensions. Queues must be worked within a standard length of time and managers monitor those work queues. However, the Oregon driver system is not sufficiently supported by established completeness performance measures tailored to the needs of data managers and data users that would be a component of a comprehensive data quality management program.	Linda Beuckens
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	The Oregon driver system is not supported by established uniformity performance measures tailored to the needs of data managers and data users that would be a component of a comprehensive data quality management program.	Linda Beuckens



Assessment Question	Rating	Assessor Conclusion	Leader
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	The narrative description appears to identify that there may be some integration performance measures by indicating that integration performance measures are reviewed regularly with the leadership team and front line staff, but the response provided does not indicate that the Oregon driver system is supported by established integration performance measures tailored to the needs of data managers and data users that would be a component of a comprehensive data quality management program as described in the Advisory.	Linda Beuckens
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	Driver system accessibility is monitored to seek improvements; however, no information was provided regarding the expected system accessibility performance (baseline) the actual results of any evaluation performance relative to the baseline.	Linda Beuckens
Has the State established numeric goals-performance metrics-for each performance measure?	Does Not Meet	The Oregon driver system is not supported by established performance measures as components of a comprehensive data quality management program described in the Advisory, therefore no performance metrics were provided.	Linda Beuckens
Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?	Does Not Meet	The response provided does not indicate that the Oregon driver system is supported by a program for evaluating high frequency error rates to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions. This item is not addressing individual employee error rates but rather system wide recurrent errors that would be reported, evaluated, and corrected either through updated user training, system updates, form revisions, or a combination of these as appropriate. This rating could be improved if information were provided describing a process for reviewing errors to drive system or user improvements.	Linda Beuckens
Are sample-based audits conducted periodically for the driver reports and related database contents for that record?	Does Not Meet	The response provided indicates that sample-based data audits are conducted but no information was provided to describe the audit methodology, no samples were provided, nor was any specific audits frequency provided. This rating could be improved if information requested in the Suggested Evidence were provided.	Linda Beuckens
Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	Does Not Meet	The only trend tracking that occurs is for budget and legislative purposes. The DMV reported that periodic comparative and trend analyses are done annually during the FTE analysis and budgeting processes. A more robust periodic comparative and trend analyses would benefit other agencies (law enforcement, highway safety, etc.) for problem identification and planning purposes.	Linda Beuckens
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	The DMV reported that no reports or information is shared with the TRCC. Failure to do this limits the opportunities for the DMV to solicit support for future needed system enhancements.	Linda Beuckens

Assessment Question	Rating	Assessor Conclusion	Leader
<b>Roadway</b>			
Are all the MIRE Fundamental Data Elements collected for all public roads?	Partially Meets	Although not all MIRE FDEs are collected for all public roads, Oregon will be working on a plan to collect the data. The final rule on the FDEs was issued in 2016, so the State should be able to develop that plan.	Angela Kargel
Do all additional collected data elements for any public roads conform to the data elements included in MIRE?	Partially Meets	The excel spreadsheet provided lists MIRE 1.0 data elements and should be updated to MIRE 2.0 from 2017. Oregon has noted it does not have budget or staff to fully meet this advisory ideal. The State provided a MIRE 2.0 FDE for Intersection Id during the second round, indicating its desire to work toward meeting the Advisory.	Angela Kargel
Are there timeliness performance measures tailored to the needs of data managers and data users?	Partially Meets	The key performance measures provided by the State include timeliness. Baseline and actual values for each timeliness measure were not provided. Update: During the second round, the State noted that its rating dropped to "partially meets advisory ideal" from "Meets advisory ideal" in 2016. The current suggested evidence for meeting the advisory includes baseline and actual values for each timeliness measure. The documentation provided includes actual values and targets but does not include baselines for each timeliness measure.	Angela Kargel
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	Oregon does a great job in documenting other measures. The State should follow through on its own suggested path for developing accuracy performance measures.	Angela Kargel
Are there completeness performance measures tailored to the needs of data managers and data users?	Partially Meets	Although the State has a measure for completion of the state map network and the publication of ARNOLD, Oregon does not have completeness performance measures for its data. Baseline and actual values for each were not provided.	Angela Kargel
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have uniformity performance measures in place. Because Oregon's HPMS data program is considered one of the best in the nation, adding a performance measure for uniformity may not a cumbersome task. An example of a uniformity measure would be the number of MIRE-compliant data elements entered into the roadway database or obtained via linkage to other databases.	Angela Kargel
Are there accessibility performance measures tailored to the needs of data managers and data users?	Partially Meets	The spreadsheet and the narrative explanation Oregon provided do not adequately describe the accessibility performance measures. The State should provide a complete list of accessibility measures and include baseline and actual values for each.	Angela Kargel
Has the State established numeric goals-performance metrics-for each performance measure?	Partially Meets	The State has numeric performance goals for some, but not all performance measures.	Angela Kargel

Assessment Question	Rating	Assessor Conclusion	Leader
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	Oregon provided a QA plan demonstrating the State's commitment to quality. The State also provided narrative of the regular coordination that occurs with the TRCC. The State should add the provision of data quality management reports to the TRCC as part of that coordination.	Angela Kargel
<b>Citation/Adjudication</b>			
Does the statewide citation tracking system have a data dictionary?	Does Not Meet	Within the data audit of the STOP program is evidence of a data dictionary but more information was needed to determine the extent of the data dictionary. No follow up information was provided regarding if all fields of the citation are included in the dictionary.	Lt. Nathan House
Do the courts' case management system data dictionaries provide a definition for each data field?	Does Not Meet	The State provided a job error screen shot but did not provide proof of a data dictionary or field definitions for the courts' case management system. Oregon does compile field names and definitions in their STOP report, but this is directly related to police contacts and not dispositions.	Lt. Nathan House
Do the citation data dictionaries clearly define all data fields?	Does Not Meet	The State only provided information on the data that is reported per mandatory legislation and did not expand on the definition of all citation fields.	Lt. Nathan House
Are the citation system data dictionaries up-to-date and consistent with the field data collection manual, training materials, coding manuals, and corresponding reports?	Does Not Meet	The response refers to page 4 of the STOP report, which only defines data fields used in the stop report, but no mention on whether these data fields are consistent with training or instruction manual. No information was provided with regard to training materials given to law enforcement agencies regarding STOP data entry.	Lt. Nathan House
Do the citation data dictionaries indicate the data fields that are populated through interfaces with other traffic records system components?	Does Not Meet	No data linking is conducted with STOP information, so no fields are populated. Oregon could consider creating a statewide citation database that tracks not only issuance of citation numbers, but all citation dispositions. Information could then be linked to the Citation/Adjudication system and Driver file for a full electronic citation process.	Lt. Nathan House
Do the courts' case management system data dictionaries indicate the data fields populated through interface linkages with other traffic records system components?	Does Not Meet	Data dictionary does not indicate what fields are created by linking data. If there are any fields that are populated by the electronic transfer, it would be good for the State to also include that in the data dictionary.	Lt. Nathan House
Are there timeliness performance measures tailored to the needs of citation systems managers and data users? Does Not Meet Advisory Ideal	Does Not Meet	The State provided information contained in the STOP report, which refers to quality control measures for missing fields, but this report is compiled annually for the legislature and there is no indication of timeliness performance measures regarding citation information.	Lt. Nathan House

Assessment Question	Rating	Assessor Conclusion	Leader
Are there accuracy performance measures tailored to the needs of citation systems managers and data users?	Partially Meets	Although the STOP report sheds light on data audits for missing and invalid information, this report is only utilized by 65 of the largest agencies in the State and will not be fully operational by all law enforcement agencies until 2021. There is no mention of accuracy performance measures for all law enforcement agencies not using this report. No clarification was provided whether there are accuracy performance measures for all other agencies.	Lt. Nathan House
Are there completeness performance measures tailored to the needs of citation systems managers and data users?	Partially Meets	Although the STOP report sheds light on data audits for missing and invalid information, this report is only utilized by 65 of the largest agencies in the State and will not be fully operational by all law enforcement agencies until 2021. There is no mention of completeness performance measures for all law enforcement agencies but once this report is deployed to all law enforcement agencies, more completeness performance measures can be established.	Lt. Nathan House
Are there uniformity performance measures tailored to the needs of citation systems managers and data users?	Does Not Meet	The State indicates uniformity examples may be obtained in the STOP report (section 2, page 3) but this is not what the question is referring to. The State could possibly obtain uniformity performance measures when all law enforcement agencies are utilizing the STOP report, such as the percentage of citation records entered into the STOP database with common uniform statewide violation codes.	Lt. Nathan House
Are there integration performance measures tailored to the needs of citation systems managers and data users?	Does Not Meet	Although the STOP system is in its infancy, it does not, nor are there any plans, to integrate with any other system. Also, the STOP report is extracted from law enforcement Record Management Systems, which in essence, could also house a crash module for reporting electronically. Even though the STOP report is a large part of what the State leaned on for multiple responses, it really has nothing to do with the citation information that is forwarded to prosecutors.	Lt. Nathan House
Are there accessibility performance measures tailored to the needs of citation systems managers and data users?	Does Not Meet	Because the STOP system is still so new, there are no plans for outside data users but as mentioned previously, the STOP report is only a small portion of the citation, but the project is heavily mentioned in the assessment.	Lt. Nathan House
Are there timeliness performance measures tailored to the needs of adjudication systems managers and data users?	Partially Meets	The Judicial Department follows disposition standards for all cases within their jurisdiction. Unfortunately, justice and municipal courts information is not available to determine whether they follow the same reporting standards. Oregon should consider consolidating all court databases to measure timeliness performance measures accurately statewide.	Lt. Nathan House
Are there accuracy performance measures tailored to the needs of adjudication systems managers and data users?	Does Not Meet	Although steps are being taken to establish data entry error goals in the E-Citation Strategic Plan, there are currently no accuracy performance measures.	Lt. Nathan House

Assessment Question	Rating	Assessor Conclusion	Leader
Are there completeness performance measures tailored to the needs of adjudication systems managers and data users?	Partially Meets	Judicial Department does have a variety of quality control measures to determine completeness of the record, however Justice and Municipal Court completeness is unknown. Consolidation of all court data is an excellent opportunity for the State to establish quality control measures that can be tracked annually.	Lt. Nathan House
Are there uniformity performance measures tailored to the needs of adjudication systems managers and data users?	Does Not Meet	No uniformity performance measures were identified. The State should strongly consider establishing a Court Rule combining all courts into one database so all measures can be established.	Lt. Nathan House
Are there integration performance measures tailored to the needs of adjudication systems managers and data users?	Does Not Meet	The State indicates they monitor the transactions/exchanges of data at the Judicial Department level, although these measures may not be used for Justice and Municipal Courts.	Lt. Nathan House
Are there accessibility performance measures tailored to the needs of adjudication systems managers and data users?	Does Not Meet	No accessibility performance measures were provided.	Lt. Nathan House
Has the State established numeric goals-performance metrics-for each adjudication system performance measure?	Does Not Meet	No numeric goals/performance measures have been established.	Lt. Nathan House
Does the State have performance measures for its DUI Tracking system?	Does Not Meet	No clarification was provided on whether there is any type of performance measures for DUI Tracking system.	Lt. Nathan House
Are sample-based audits conducted periodically for citations and related database content for that record?	Does Not Meet	The State has not established numeric goals-performance metrics. Periodic audits from time-to-time is a good way to gauge the health of a system and its records.	Lt. Nathan House
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	Quality management reports are not provided to the TRCC.	Lt. Nathan House
<b>EMS/Injury Surveillance</b>			
Are there processes for returning rejected EMS patient care reports to the collecting entity and tracking resubmission to the statewide EMS database?	Partially Meets	The State describes the process by which reports with errors are rejected and submitting agencies are notified of rejected reports. The system does not have an identified effective method for tracking corrections and resubmissions.	Dagan Wright

Assessment Question	Rating	Assessor Conclusion	Leader
Are there accuracy performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	No accuracy measures have been selected for the Oregon Prehospital EMS Data System.	Dagan Wright
Are there completeness performance measures tailored to the needs of EMS system managers and data users?	Partially Meets	There are completeness measures related to specific data elements that are included on the PCR. These measures could be combined to develop an overall completeness measure for the EMS data.	Dagan Wright
Are there uniformity performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are currently no uniformity performance measures tailored to the needs of EMS system managers and data users.	Dagan Wright
Are there integration performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are currently no integration performance measures tailored to the needs of EMS system managers and data users.	Dagan Wright
Are there accessibility performance measures tailored to the needs of EMS system managers and data users?	Partially Meets	Created performance measures and descriptions for accessibility for the Oregon Prehospital EMS Data System but no evidence of a report. Encourage accessibility to grow beyond feedback from agencies.	Dagan Wright
Has the State established numeric goals-performance metrics-for each EMS system performance measure?	Partially Meets	The document provides goals and measures for the timeliness of report submissions in addition to completeness of selected data elements. It does not provide metrics for each EMS system performance measure.	Dagan Wright
Are EMS data quality management reports produced regularly and made available to the State TRCC?	Partially Meets	EMS data performance measures had been presented to the TRCC in the past assessment but not currently.	Dagan Wright
Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?	Does Not Meet	The Oregon Association of Hospitals and Health Association collects Emergency Department and Hospital data and edit checks and validation rules are not shared. The State mentioned that there are automated procedures flagging data quality issues with the Essence, but the document provided measured completeness and not errors.	Dagan Wright
Are there processes for returning rejected emergency department and/or hospital discharge records to the collecting entity and tracking resubmission to the statewide emergency department and hospital discharge databases?	Does Not Meet	The evidence provided did not include the processes for returning rejected emergency department or hospital discharge records.	Dagan Wright

Assessment Question	Rating	Assessor Conclusion	Leader
Are there <type> performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users? <i>Timeliness, Accuracy, Completeness, Uniformity, Integration, Accessibility</i>	Does Not Meet	There are currently no <type> performance measures tailored to the needs of emergency department and/or hospital discharge database managers and data users.	Dagan Wright
Has the State established numeric goals-performance metrics-for each emergency department and/or hospital discharge database performance measure?	Does Not Meet	The State has not established numeric goals-performance metrics-for each emergency department and/or hospital discharge database performance measure.	Dagan Wright
Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the emergency department and/or hospital discharge databases?	Partially Meets	The State conducts completeness on each of the data fields in the Emergency Department and Hospital data. Consider adding accuracy and uniformity to the review process.	Dagan Wright
Is data quality feedback from key users regularly communicated to emergency department and/or hospital discharge data collectors and data managers?	Partially Meets	An example of feedback from data users was received by the State and corrected an error in the Hospital dataset. The process was not described.	Dagan Wright
Are emergency department and/or hospital discharge data quality management reports produced regularly and made available to the State TRCC?	Does Not Meet	The State response indicates that department and/or hospital discharge data quality management reports are not being produced regularly and made available to the State TRCC.	Dagan Wright
Are there timeliness performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are currently no timeliness performance measures tailored to the needs of trauma registry managers and data users. Submittal deadlines are not performance measures but can be used to create them.	Dagan Wright
Are there <type> performance measures tailored to the needs of trauma registry managers and data users? <i>Accuracy, Completeness, Uniformity, Integration, Accessibility</i>	Does Not Meet	There are currently no <type> performance measures tailored to the needs of trauma registry managers and data users.	Dagan Wright
Has the State established numeric goals-performance metrics-for each trauma registry performance measure?	Does Not Meet	The State has not established numeric goals-performance metrics-for each trauma registry performance measure.	Dagan Wright
Are trauma registry data quality management reports produced regularly and made available to the State TRCC?	Does Not Meet	Trauma registry data quality management reports are not regularly produced and made available to the State TRCC. The reports are only available to hospitals and regional management.	Dagan Wright

<b>Assessment Question</b>	<b>Rating</b>	<b>Assessor Conclusion</b>	<b>Leader</b>
Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?	Does Not Meet	A sample of a quality control review of injury records that details the system's data completeness, accuracy, and uniformity of the Vital Records data was not provided.	Dagan Wright
Are vital records data quality management reports produced regularly and made available to the State TRCC?	Does Not Meet	The State indicates that vital records data quality management reports are not produced regularly and made available to the State TRCC.	Dagan Wright



## 5.0 Demonstrated Achievement of the Quantitative Improvement in the Past Year

To demonstrate achievement of the quantitative improvement to qualify for NHTSA 405c funding in FFY 2023 Oregon submitted the following metric:

In the period beginning April 1, 2021, and ending March 31, 2022, there were no agency participants in the Traffic Count Monitoring system. During the period April 1, 2022, to March 31, 2023, twelve local agency users were established in the system, resulting in a 100% improvement.

The performance measure is a subset found in the Oregon Traffic Records Plan, but also addresses the model performance measures. The model performance measure involved is:

*R-X-1. To measure accessibility of a specific file within the roadway database: Identify the principal users of the roadway file, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.*

The sub-measure, as identified in the Oregon Traffic Records Strategic Plan, is:

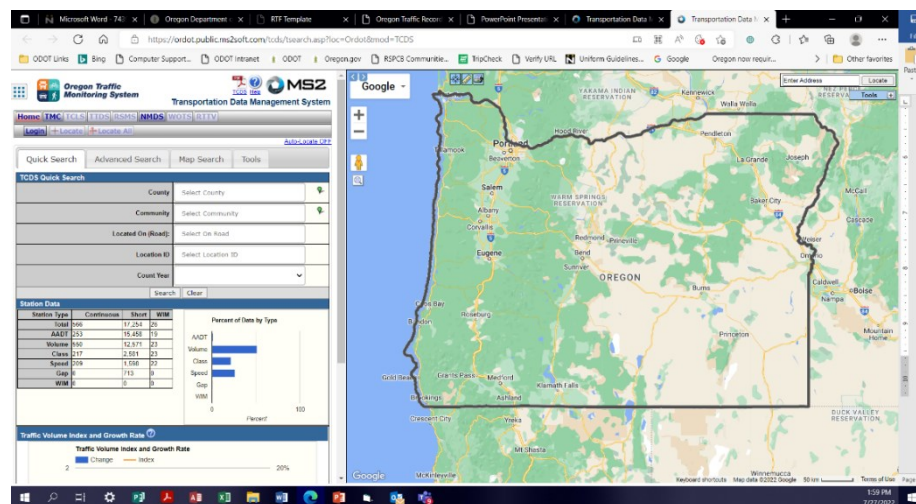
*Increase the percentage of roadway data that is available for on-line spatial reporting (TransGIS).*

The online public access to the system is at the following website:

<https://ordot.public.ms2soft.com/tcds/tsearch.asp?loc=Ordot&mod=TCDS>.

Previously it was unavailable to the public, so this represents 100% improvement in public accessibility to this data in the requisite time periods. In addition, the following specific communities can now enter and access data; this also represent 100% improvement during the time periods.

- City of Bend
- City of Lincoln City
- City of Portland
- City of Salem
- Lane County
- Polk County
- Oregon Metro
- Mid-Willamette Valley Council of Governments





## 6.0 Approved FFY 2023 TRCC Projects

Following are those traffic records projects approved in the Oregon FFY 2023 Highway Safety Plan.

### CJC Citation Database

F1906CMD-23-25-05 - The Oregon Department of Justice-Criminal Justice Commission (CJC) is pursuing a vendor to create a secure, internet-accessible data collection portal to process and securely store data on several hundred-thousand traffic stops annually. The primary goal of project is to institute a statewide data collection system that will:

1. Provide the public and policy makers with current data about who is being stopped, searched, and arrested at traffic stops.
2. Require law enforcement statewide to collect certain information about every discretionary traffic and pedestrian stop.
3. Contain all CJC findings, and aggregate data submitted by law enforcement, and be available to the public.

The project is a result of the 2015 Oregon State Police (OSP) and Attorney Generals Racial Profiling Prohibition Task Force and their recommendations, as encompassed in the 2019 Legislative Session in HB 2355.

### Use Capacity Building

M3DA-23-54-03 - This project will allow a pilot project to increase access to and use of NEMSIS data (Oregon Health Authority's database) in Oregon by engineers and other professionals for decision making purposes. The project will pilot test ways to track usage of data. It is expected that performance measure IX1, will measure accessibility of the EMS file: Identify the principal users of the file, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses, as shown in the tables listed in the Traffic Records chapter of the 2023 Oregon Transportation Safety Performance Plan, the ability to increase the percent of data retrieval and analysis will be improved. Currently zero percent of data retrieval and analysis is available and tracked for these purposes by engineers and other professionals, where a successful project will result in one or more of these events being documented in the EMS database/NEMSIS.

### Vehicle Operator (Driver) Education Module

M3DA-23-54-04 - This project will develop modules to allow driver education providers and testers to directly input driver education course completion electronically to DMV, and for DMV technicians to know real-time/instantly when students have completed driver education courses. ODOT-DMV is in Phase 3 of an 8-year phase-in of its 'new system'; this project is specific to the

driver/operator database piece, and specific to receipt/confirmation coming in from 3rd party vendors on students passing knowledge tests, skills tests, scores, etc. Major expenditures include project staff labor and consultant charges.

D-U-1: The number of standards-compliant data elements entered into the driver database or obtained via linkage to other databases. Currently the driver education database is not linked to the DMV Driver database, where the value is zero, with an increase of 1 or more records being linked between Oregon's driver education database and the DMV Driver database representing 100% improvement.

## OHA EMS/NEMESIS Data Entry Devices

M3DA-23-54-06 - This project is to purchase data entry devices to allow more timely and accurate input of patient events into the NEMESIS system by EMS technicians. The devices will be provided, along with training and software to make them ready to implement for the participating local agencies. It is expected that data element IT, as listed below and derived from the Traffic Records chapter of the 2022 Oregon Transportation Safety Performance Plan, will be improved. I T-1: The median or mean number of days from a) the date of an EMS run to b) the date when the EMS patient care report is entered into the database. Currently submissions are within 5 hours; it is anticipated that this project will help Oregon improve timeliness below the current 5 hour submission measure.

## CARS Modernization

TS-23-54-05- This project is to evaluate and where applicable modernize the Oregon Vehicle Crash Reporting System to allow more timely availability of crash data in Oregon. This is a high priority data system improvement in the Traffic Records Strategic Plan. While many measures would be improved, the key measure anticipated to improve is C-T-1: The median or mean number of days from a) the crash date to b) the date the crash report is entered into the database.

## eCrash/eCitation Expansion

TS-23-54-10- This project allows for the expansion of electronic citation and crash reporting by Oregon law enforcement agencies through the purchase of software and equipment. Through the purchase of system components such as the infrastructure (equipment/hardware, software and licenses) Oregon law enforcement agencies are able to move toward more accurate digital submission of crash and citation data to the courts and DMV for processing and analysis. A side benefit of this project also addresses multiple improvement points within multiple systems, by allowing agencies to move forward with key system improvements identified in the current Traffic Records Coordinating Committee (TRCC) Strategic Plan, and in the most recent NHTSA assessment of Oregon's traffic records program. The project purpose is to improve the procedures/process flows for the Crash data system, and reflect best practices as identified in the Traffic Records Program Assessment Advisory, including an improvement to the interfaces with the Crash data system; improve the data quality control program for the Crash data system;

improve the interfaces with the Citation and Adjudication systems; and improve the data quality control program for the Citation and Adjudication systems. Subrecipient: Offered on a need and request basis to all state, city and county law enforcement agencies. Separate HSP modifications will be submitted for each one per NHTSA direction.

## 7.0 Traffic Records Deficiencies and Performance Measures

Following are NHTSA’s model performance measures for traffic records systems by data system.<sup>3</sup>

CRASH DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS	UNIFORMITY	INTEGRATION	ACCESSIBILITY
<p>C-T-1: The <i>median or mean</i> number of days from (a) the crash date to (b) the date the crash report is entered into the database.</p> <p>C-T-2: The <i>percentage</i> of crash reports entered into the database within XX* days after the crash.</p> <p>*e.g., 30, 60, or 90 days</p>	<p>C-A-1: The <i>percentage</i> of crash records with no errors in <i>critical</i> data elements.</p> <p>Example: Crash severity</p> <p>C-A-2: The <i>percentage</i> of in-State registered vehicles on the State crash file with Vehicle Identification Number (VIN) matched to the State vehicle registration file.</p>	<p>C-C-1: The <i>percentage</i> of crash records with no missing <i>critical</i> data elements.</p> <p>C-C-2: The <i>percentage</i> of crash records with no missing data elements.</p> <p>C-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> data elements for which unknown is not an acceptable value.</p>	<p>C-U-1: The <i>number</i> of MMUCC-compliant data elements entered into the crash database or obtained via linkage to other databases.</p>	<p>C-I-1: The <i>percentage</i> of appropriate records in the crash database that are linked to another system or file.</p> <p>Examples: Crash w/in-State driver <i>linked to</i> Driver file</p> <p>Crash w/EMS response <i>linked to</i> EMS file</p>	<p>C-X-1: To measure accessibility:</p> <ul style="list-style-type: none"> <li>Identify the principal users of the crash database</li> <li>Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>Document the method of data collection and the principal users’ responses</li> </ul>

<sup>3</sup> NHTSA, Model Performance Measures for State Traffic Records Systems, DOT-HS-811-441, NHTSA, 2011. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811441>

VEHICLE DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS	UNIFORMITY	INTEGRATION	ACCESSIBILITY
<p>V-T-1: The <i>median</i> or <i>mean</i> number of days from (a) the date of a critical status change in the vehicle record to (b) the date the status change is entered into the database.</p> <p>V-T-2: The <i>percentage</i> of vehicle record updates entered into the database within XX* days after the critical status change.</p> <p>*e.g., 1, 5, or 10 days</p>	<p>V-A-1: The <i>percentage</i> of vehicle records with no errors in <i>critical</i> data elements.</p> <p>Example: Vehicle Identification Number (VIN)</p>	<p>V-C-1: The <i>percentage</i> of vehicle records with no missing <i>critical</i> data elements.</p> <p>V-C-2: The <i>percentage</i> of vehicle records with no missing data elements.</p> <p>V-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> data elements for which unknown is not an acceptable value.</p> <p>V-C-4: The <i>percentage</i> of vehicle records from large trucks and buses that have all of the following data elements: Motor Carrier ID, Gross Vehicle Weight Rating/Gross Combination Weight Rating, Vehicle Configuration, Cargo Body Type, and Hazardous Materials (Cargo Only).</p>	<p>V-U-1: The <i>number</i> of standards-compliant* data elements entered into a database or obtained via linkage to other databases.</p>	<p>V-I-1: The <i>percentage</i> of appropriate records in the vehicle file that are linked to another system or file.</p> <p>Example: Vehicle registration <i>linked to</i> Driver file</p>	<p>V-X-1: To measure accessibility:</p> <ul style="list-style-type: none"> <li>Identify the principal users of the vehicle database</li> <li>Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>Document the method of data collection and the principal users' responses</li> </ul>

DRIVER DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS	UNIFORMITY	INTEGRATION	ACCESSIBILITY
<p>D-T-1: The <i>median</i> or <i>mean</i> or number of days from (a) the date of a driver's adverse action to (b) the date the adverse action is entered into the database.</p> <p>D-T-2: The <i>median</i> or <i>mean</i> number of days from (a) the date of receipt of citation disposition notification by the driver repository to (b) the date the disposition report is entered into the database.</p>	<p>D-A-1: The <i>percentage</i> of driver records that have no errors in <i>critical</i> data elements.</p> <p>Example: Date of Birth</p> <p>D-A-2: The <i>percentage</i> of records on the State driver file with Social Security Numbers (SSN) successfully verified using Social Security Online Verification (SSOLV) or other means.</p>	<p>D-C-1: The <i>percentage</i> of driver records with no missing <i>critical</i> data elements.</p> <p>D-C-2: The <i>percentage</i> of driver records with no missing data elements.</p> <p>D-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> data elements for which unknown is not an acceptable value.</p>	<p>D-U-1: The <i>number</i> of standards-compliant data elements entered into the driver database or obtained via linkage to other databases.</p>	<p>D-I-1: The <i>percentage</i> of appropriate records in the driver file that are linked to another system or file.</p> <p>Example: Driver in crash <i>linked to</i> adjudication file</p>	<p>D-X-1: To measure accessibility:</p> <ul style="list-style-type: none"> <li>Identify the principal users of the driver database</li> <li>Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>Document the method of data collection and the principal users' responses</li> </ul>



ROADWAY DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS	UNIFORMITY	INTEGRATION	ACCESSIBILITY
<p>R-T-1: The <i>median or mean</i> number of days from (a) the date a periodic collection of a critical roadway data element is complete (e.g., Annual Average Daily Traffic) to (b) the date the updated critical roadway data element is entered into the database.</p> <p>R-T-2: The <i>median or mean</i> number of days from (a) the date a roadway project is completed to (b) the date the updated critical data elements are entered into the database.</p>	<p>R-A-1: The <i>percentage</i> of all road segment records with no errors in <i>critical</i> data elements.</p> <p>Example: Surface/Pavement</p>	<p>R-C-1: The <i>percentage</i> of road segment records with no missing <i>critical</i> data elements.</p> <p>R-C-2: The <i>percentage</i> of public road miles or jurisdictions identified on the State's basemap or roadway inventory file.</p> <p>R-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> data elements for which unknown is not an acceptable value.</p> <p>R-C-4: The <i>percentage</i> of total roadway segments that include location coordinates, using measurement frames such as a GIS basemap.</p>	<p>R-U-1: The <i>number</i> of Model Inventory of Roadway Elements (MIRE)-compliant data elements entered into a database or obtained via linkage to other databases.</p>	<p>R-I-1: The <i>percentage</i> of appropriate records in a specific file in the roadway database that are linked to another system or file.</p> <p>Example: Bridge inventory <i>linked to</i> roadway basemap</p>	<p>R-X-1: To measure accessibility of a specific file within the roadway database:</p> <ul style="list-style-type: none"> <li>• Identify the principal users of the roadway file</li> <li>• Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>• Document the method of data collection and the principal users' responses</li> </ul>



CITATION/ADJUDICATION DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS*	UNIFORMITY*	INTEGRATION*	ACCESSIBILITY*
<p>C/A-T-1: The <i>median</i> or <i>mean</i> number of days from (a) the date a citation is issued to (b) the date the citation is entered into the statewide citation database, or a first available repository.</p> <p>C/A-T-2: The <i>median</i> or <i>mean</i> number of days from (a) the date of charge disposition to (b) the date the charge disposition is entered into the statewide adjudication database, or a first available repository.</p> <p>Note: Many States do not have statewide databases for citation or adjudication records. Therefore, in some citation and adjudication data systems, timeliness and other attributes of data quality should be measured at individual first available repositories.</p>	<p>C/A-A-1: The <i>percentage</i> of citation records with no errors in <i>critical</i> data elements.</p> <p>Example: Time Citation Issued</p> <p>C/A-A-2: The <i>percentage</i> of charge disposition records with no errors in <i>critical</i> data elements.</p> <p>Example: Citation reference number</p>	<p>C/A-C-1: The <i>percentage</i> of citation records with no missing <i>critical</i> data elements.*</p> <p>C/A-C-2: The <i>percentage</i> of citation records with no missing data elements.*</p> <p>C/A-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> citation data elements for which unknown is not an acceptable value.*</p>	<p>C/A-U-1: The <i>number</i> of Model Impaired Driving Record Information System (MIDRIS)-compliant data elements entered into the citation database or obtained via linkage to other databases.</p> <p>C/A-U-2: The <i>percentage</i> of citation records entered into the database with common uniform statewide violation codes.</p>	<p>C-I-1: The <i>percentage</i> of appropriate records in the citation file that are linked to another system or file.</p> <p>Example: DWI citation <i>linked to</i> Adjudication file</p>	<p>C/A-X-1: To measure accessibility of the citation database:</p> <ul style="list-style-type: none"> <li>Identify the principal users of the citation database</li> <li>Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>Document the method of data collection and the principal users' responses</li> </ul>
<p><i>*These measures of completeness, uniformity, integration, and accessibility are also applicable to the adjudication file.</i></p>					

<b>EMS/INJURY SURVEILLANCE</b>					
<b>TIMELINESS*</b>	<b>ACCURACY*</b>	<b>COMPLETENESS*</b>	<b>UNIFORMITY</b>	<b>INTEGRATION*</b>	<b>ACCESSIBILITY*</b>
<p>I-T-1: The <i>median</i> or <i>mean</i> number of days from (a) the date of an EMS run to (b) the date when the EMS patient care report is entered into the database.</p> <p>I-T-2: The <i>percentage</i> of EMS patient care reports entered into the State EMS discharge file within XX* days after the EMS run.</p> <p>*e.g., 5, 30, or 90 days</p>	<p>I-A-1: The <i>percentage</i> of EMS patient care reports with no errors in <i>critical</i> data elements.</p> <p>Example: Response Time</p>	<p>I-C-1: The <i>percentage</i> of EMS patient care reports with no missing critical data elements.</p> <p>I-C-2: The <i>percentage</i> of EMS patient care reports with no missing data elements.</p> <p>I-C-3: The <i>percentage</i> of unknowns or blanks in critical data elements for which unknown is not an acceptable value.</p>	<p>I-U-1: The <i>percentage</i> of records on the State EMS data file that are National Emergency Medical Service Information System (NEMSIS)-compliant.*</p> <p>I-U-2: The <i>number</i> of records on the State EMS data file that are National Emergency Medical Service Information System (NEMSIS)-compliant.*</p> <p>*Where applicable, analogous national standards for uniformity may be used as follows:</p> <p>State Emergency Dept. File &amp; Universal Billing 04 (UB04) State Hospital Discharge File &amp; Universal Billing 04 (UB04) State Trauma Registry File &amp; National Trauma Data Standards (NTDS) State Vital Records &amp; National Association for Public Health Statistics and Information Systems (NAPHSIS)</p>	<p>I-I-1: The <i>percentage</i> of appropriate records in the EMS file that are linked to another system or file.</p> <p>Example: EMS response <i>linked to</i> Trauma file</p>	<p>I-X-1: To measure accessibility of the EMS file:</p> <ul style="list-style-type: none"> <li>• Identify the principal users of the file</li> <li>• Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request</li> <li>• Document the method of data collection and the principal users' responses</li> </ul>
<p><b>*These measures of timeliness, accuracy, completeness, integration, and accessibility are also applicable to the following files: State Emergency Dept. File, State Hospital Discharge File, State Trauma Registry File, State Vital Records.</b></p>					



Connected to these model performance measures, the following tables identify the deficiencies and performance measures most applicable to Oregon's current traffic records status.

**Table 7.1 Crash System**

	Data Quality	Reportable Crash Data
Deficiency	Timeliness	A high-speed imaging and document management system for crash reports could improve the timeliness of processing for ODOT.
Deficiency	Timeliness	Delays in crash report processing while DMV builds a case file (30-90 days) are unnecessary. The CAR Unit could begin processing crash reports almost as soon as they are received by DMV rather than waiting months for the paper to be released to them. Courts, law enforcement agencies, and DMV would benefit from improved timeliness and accuracy supported by more field data collection. Current actions are addressing this issue; however, increased staffing demands need to be addressed.
Performance Measure	Timeliness	Decrease the number of days until the annual statewide crash data file is available each year.
Performance Measure	Timeliness	Increase the percentage of crash reports reported to FMCSA within 90 days.
Performance Measure	Timeliness	C-T-1: The median or mean number of days from a) the crash date to b) the date the crash report is entered into the database.
Performance Measure	Timeliness	C-T-2: The percentage of crash reports entered into the database within XX days after the crash (e.g., 30, 60, or 90 days).
Deficiency	Accuracy	Oregon does not have a formal data quality measurement program that addresses all of the data quality attributes. In particular, the data accuracy and completeness measures should be expanded. The measures should be based on initial submissions by law enforcement, not just the final data file created by the CAR unit staff.
Deficiency	Accuracy	An error-tracking system that can report the number and type of errors for each law enforcement agency's crash reports does not exist.
Deficiency	Accuracy	There is a need to improve the Police Officer's Instruction Manual as part of the next crash report form revision.
Deficiency	Accuracy	Location data could be improved by including GPS and/or map-based location coding tools in projects for electronic crash data collection.
Deficiency	Accuracy	Crash data system accuracy could be improved if system generated validations were added (hard-coded business rules.)
Performance Measure	Accuracy	Increase the number of crash data elements having system generated validations within the crash database data entry screen (CDS).

Data Quality		Reportable Crash Data
Performance Measure	Accuracy	C-A-1: The percentage of crash records with no errors in critical data elements (example: crash severity).
Performance Measure	Accuracy	C-A-2: The percentage of in-state registered vehicles on the State crash file with Vehicle Identification Number (VIN) matched to the State vehicle registration file.
Deficiency	Completeness	Crashes are under-reported.
Deficiency	Completeness	Increase outreach activities to build support for law enforcement crash reporting data quality.
Deficiency	Completeness	A public report of percentage of crashes, by jurisdiction, reported by each law enforcement agency does not exist.
Deficiency	Completeness	State law does not require reporting of crashes by police agencies, and it is suspected that the state is missing 30-35% of all reportable crashes. Crash location data is often inaccurate on an operator's report and the source of approximately two-thirds of the data is provided from operator reports.
Deficiency	Completeness	Missing location data from the crash form.
Performance Measure	Completeness	Increase the percentage of crash reports submitted by law enforcement officers.
Performance Measure	Completeness	Increase the percentage of fatal and injury crash reports (no property damage only) submitted by law enforcement officers.
Deficiency	Completeness	Missing MMUCC data elements on the crash form.
Performance Measure	Completeness	Increase the number of MMUCC collected data elements present on the crash form.
Deficiency	Completeness	Missing location data from the crash form.
Performance Measure	Completeness	Increase the percentage of crashes coded with a geospatial coordinate value.
Performance Measure	Completeness	C-C-1: The percentage of crash records with no missing critical data elements.
Performance Measure	Completeness	C-C-2: The percentage of crash records with no missing data elements.
Performance Measure	Completeness	C-C-3: The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.
Deficiency	Uniformity	The number of MMUCC data elements entered into the crash database or obtained via linkage to other databases.

	Data Quality	Reportable Crash Data
Performance Measure	Uniformity	C-U-1: The number of MMUCC-compliant data elements entered into the crash database or obtained via linkage to other databases.
Deficiency	Integration	Web-based crash reporting for both operator reports and law enforcement reports is lacking. Web reporting will help agencies with no automation to submit their reports electronically and reduce the amount of data entry and delay in both DMV and the CAR unit.
Deficiency	Integration	Electronic data transfer of crash data from law enforcement is non-existent. Failure to accept electronic data is inevitably going to cause resistance among law enforcement agencies and could have a deleterious effect on the ongoing efforts to increase the proportion of crashes they investigate.
Deficiency	Integration	Subsidies for law enforcement field data collection equipment and software should be based on the proportion of crash reports submitted by that agency in their jurisdiction.
Deficiency	Integration	Law enforcement agencies' ongoing budget may not include the cost of vehicle replacements, including field data collection hardware and software maintenance.
Deficiency	Integration	ODOT is unable to share crash report images simultaneously with the Crash Analysis and Reporting Unit and the DMV, or with other legitimate users.
Deficiency	Integration	ODOT's crash database cannot currently accept data electronically submitted from other sources, whether law enforcement or operator reports.
Performance Measure	Integration	Increase the number of law enforcement officers that utilize a system that links local citation database to court data system electronically to send citations to courts.
Performance Measure	Integration	C-I-1: The percentage of appropriate records in the crash database that are linked to another system or file (examples: Crash w/in-State driver linked to Driver file. Crash w/EMS response linked to EMS file).
Deficiency	Accessibility	A method of generating crash report images from electronically submitted crash reports does not exist.
Deficiency	Accessibility	Oregon is unable to generate crash images to serve the need for DMV, TDD, regional engineers, and others access to crash reports.
Deficiency	Accessibility	Direct access to crash report images (when available) through the GIS is unavailable.
Deficiency	Accessibility	Limited crash analysis available on the Internet via TransGIS and TransViewer, however, analysis and data extracts are available for up to 22 years of crash data through the CAR Unit.
Performance Measure	Accessibility	Increase the percentage of law enforcement agencies using on-line crash data system for data retrieval and statistical reports.
Performance Measure	Accessibility	Increase the number of ODOT region staff, as well as city and county users, accessing on-line collision diagramming tools for specific corridor segments.

Data Quality		Reportable Crash Data
Performance Measure	Accessibility	C-X-1: To measure accessibility: Identify the principal users of the crash database, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.

**Table 7.2 Roadway System**

Data Quality		Roadway Data
Deficiency	Timeliness	Delays between a) the date a roadway project is completed to b) the date the updated critical data elements are entered into the database.
Performance Measure	Timeliness	R-T-1: The median or mean number of days from a) the date a periodic collection of a critical roadway data element is complete (e.g., Annual Average Daily Traffic) to b) the date the updated critical roadway element is entered into the database.
Performance Measure	Timeliness	R-T-2: The median or mean number of days from a) the date a roadway project is completed to b) the date the updated critical data elements are entered into the database.
Deficiency	Accuracy	Roadway segment records may contain errors in critical data elements (example: Surface/Pavement).
Performance Measure	Accuracy	R-A-1: The percentage of all roadway segment records with 0 errors in critical data elements (example: Surface/Pavement).
Deficiency	Completeness	There is no statewide central source where all county roadway inventory and traffic count data are captured. The ODOT Asset Management System will have the capability of including local roadway data; however, a common location coding method must be implemented before this becomes practical.
Performance Measure	Completeness	Increase the percentage of traffic count data contained within the ODOT Asset Management System (one statewide source).
Performance Measure	Completeness	R-C-1: The percentage of road segment records with no missing critical data elements.
Performance Measure	Completeness	R-C-2: The percentage of public road miles or jurisdictions identified on the State's basemap or roadway inventory file.
Performance Measure	Completeness	R-C-3: The percentage of roadway unknowns or blanks in critical data elements for which unknown is not an acceptable value.

	Data Quality	Roadway Data
Performance Measure	Completeness	C-4: The percentage of total roadway segments that include location coordinates, using measurement frames such as a GIS basemap.
Deficiency	Uniformity	There is no statewide central source where all county roadway inventory and traffic count data are captured. The ODOT Asset Management System will have the capability of including local roadway data; however, a common location coding method must be implemented before this becomes practical.
Deficiency	Uniformity	State highway referencing need to eliminate multiple occurrences of the same mile point on a single route. A pilot project on OR 140 is underway to demonstrate any resulting efficiencies.
Performance Measure	Uniformity	Decrease the number of instances where there are multiple occurrences of the same mile marker on a single route.
Performance Measure	Uniformity	R-U-1: The number of Model Inventory of Roadway Elements (MIRE)-compliant data elements entered into a database or obtained via linkage to other databases.
Deficiency	Integration	There is a need to create necessary translation mechanisms between coordinate-based and other location coding methods used by ODOT to support ongoing analyses and to support spatial analysis of routes and areas in addition to specific points on the roadway. Beginning with 2007 crash data, coordinates are available for all jurisdictions of roadway.
Performance Measure	Integration	R-I-1: The percentage of appropriate records in a specific file in the roadway database that are linked to another system or file (example: Bridge inventory linked to roadway basemap).
Deficiency	Accessibility	Limited roadway data is available for on-line spatial reporting in TransGIS and Internet road inventory reporting in TransViewer.
Performance Measure	Accessibility	Increase the percentage of roadway data that is available for on-line spatial reporting (TransGIS).
Performance Measure	Accessibility	R-X-1: To measure accessibility of a specific file within the roadway database: Identify the principal users of the roadway file, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.



**Table 7.3 Vehicle System**

	Data Quality	Vehicle Data
Deficiency	Timeliness	Delays between a) the date of a critical status change in the vehicle record to b) the date the status change is entered into the database.
Performance Measure	Timeliness	Decrease the number of days until vehicle registration and title information is available through the Law Enforcement Data System (LEDS) network.
Performance Measure	Timeliness	V-T-1: The median or mean number of days from a) the date of a critical status change in the vehicle record to b) the date the status change is entered into the database.
Performance Measure	Timeliness	V-T-2: The percentage of vehicle record updates entered into the database within XX days after the critical status change (e.g., 1, 5, or 10 days).
Deficiency	Accuracy	Verifying VIN and make/model between the insurance and registration databases has identified some data quality concerns.
Performance Measure	Accuracy	Decrease the number of errors received when verifying VIN and make/model between the insurance and registration databases.
Performance Measure	Accuracy	Maintain 100% of inspection records reported over a 12-month period that were matched to a company registered in MCMIS.
Performance Measure	Accuracy	V-A-1: The percentage of vehicle records with no errors in critical data elements (example: VIN).
Deficiency	Completeness	Increase the percentage of vehicle records with no missing critical data elements.
Performance Measure	Completeness	Increase the percentage of fatal and non-fatal crash records in the MCMIS database with complete vehicle information (i.e., the number of crash records with complete vehicle information divided by the number of crash records reported) over a 12-month time period.
Performance Measure	Completeness	V-C-1: The percentage of vehicle records with no missing critical data elements.
Performance Measure	Completeness	V-C-2: The percentage of vehicle records with no missing data elements.
Performance Measure	Completeness	V-C-3: The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.
Performance Measure	Completeness	V-C-4: The percentage of vehicle records from large trucks and buses that have all of the following data elements: Motor Carrier ID, Gross Vehicle Weight Rating/Gross Combination Weight Rating, Vehicle Configuration, Cargo Body Type, and Hazardous Materials (Cargo Only).

	Data Quality	Vehicle Data
Deficiency	Uniformity	Increase the number of standards-compliant data elements entered into a database or obtained via linkage to other databases.
Performance Measure	Uniformity	V-U-1: The number of standards-compliant data elements entered into a database or obtained via linkage to other databases.
Deficiency	Integration	Data collection using machine-readable features of registration documents is not available.
Deficiency	Integration	Older technology is the primary barrier to data linkage between the crash and vehicle databases. Legislation would be required in Oregon in order to use the link between driver and vehicle data to support blocking registrations for suspended or revoked drivers who are vehicle owners.
Performance Measure	Integration	Increase the percentage of vehicle owners and operators that can be linked to the driver database.
Performance Measure	Integration	Increase the percentage of vehicle owners and operators that can be linked to the crash database.
Performance Measure	Integration	V-I-1: The percentage of appropriate records in the vehicle file that are linked to another system or file (example: Vehicle registration linked to Driver file).
Deficiency	Accessibility	Law enforcement officers have access to the vehicle registration and title information through the Law Enforcement Data System (LEDS) network. Oregon is not a participant in the National Motor Vehicle Title Information System (NMVTIS).
Performance Measure	Accessibility	Increase the percentage of active titles and brands updated to the National Motor Vehicle Title Information System (NMVTIS) Vehicle Identification Number (VIN) pointer and brand files ( <i>currently 0%</i> ).
Performance Measure	Accessibility	V-X-1: To measure accessibility: Identify the principal users of the vehicle database, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.

Table 7.4 Driver System

	Data Quality	Driver Data
Deficiency	Timeliness	There are delays between receiving crash reports at DMV and posting on the driver record.
Performance Measure	Timeliness	Increase the percentage of crash occurrences posted on the driver record within less than 25 days following the crash.

	Data Quality	Driver Data
Deficiency	Timeliness	The state is unable to meet the Federal requirement for reporting commercial driver convictions in 10 days. DMV receives only limited information electronically.
Performance Measure	Timeliness	Increase the percentage of commercial driver convictions reported within 10 days.
Performance Measure	Timeliness	D-T-1: The median or mean number of days from a) the date of a driver's adverse action to b) the date the adverse action is entered into the database.
Performance Measure	Timeliness	D-T-2: The median or mean number of days from a) the date of receipt of citation disposition notification by the driver repository to b) the date the disposition report is entered into the database.
Deficiency	Accuracy	Centralized issuance and facial recognition software are planned to decrease the chances of license fraud.
Performance Measure	Accuracy	Decrease the percentage of duplicate records for individuals.
Performance Measure	Accuracy	D-A-1: The percentage of driver records that have no errors in critical data elements (example: Date of Birth).
Performance Measure	Accuracy	D-A-2: The percentage of records on the State driver file with Social Security Numbers (SSN) successfully verified using Social Security Online Verification (SSOLV) or other means.
Deficiency	Completeness	Histories of serious offenses when licensing drivers from other states for non-commercial drivers are not recorded, as is done for commercial drivers in compliance with CDLIS.
Deficiency	Completeness	Oregon is lacking a statewide citation tracking system.
Deficiency	Completeness	Not all traffic cases result in a disposition, so not all convictions are reported to the DMV.
Performance Measure	Completeness	Increase the percentage of convictions reported to the DMV. <i>(Currently, not measurable.)</i>
Performance Measure	Completeness	Increase the percentage of fatal and non-fatal crash records in the MCMIS database with complete driver information (i.e., the number of crash records with complete driver information divided by the number of crash records reported) over a 12-month time period.
Performance Measure	Completeness	D-C-1: The percentage of driver records with no missing critical data elements.
Performance Measure	Completeness	D-C-2: The percentage of driver records with no missing data elements.
Performance Measure	Completeness	D-C-3: The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.

	Data Quality	Driver Data
Deficiency	Uniformity	Increase the number of standards-compliant data elements entered into the driver database or obtained via linkage to other databases.
Performance Measure	Uniformity	Increase the percentage of Social Security Numbers (SSNs) and immigration documents verified. <i>(Note: DMV is currently verifying SSNs for all licenses, ID cards, and driver permits. DMV began using the Federal Systematic Alien Verification for Entitlements (SAVE) system to verify immigration status in January 2010.)</i>
Performance Measure	Uniformity	D-U-1: The number of standards-compliant data elements entered into the driver database or obtained via linkage to other databases.
Deficiency	Integration	Electronic receipt of citation records from courts is lacking.
Deficiency	Integration	The driver records database is currently not capable of supporting linkage with crash and other databases.
Deficiency	Integration	DMV receives only failure-to-appear and suspension orders from Circuit Courts electronically, even though many courts transmit convictions electronically through the Oregon Justice Information Network (OJIN). Driver file includes a notation of crash involvement that is placed on the file manually at DMV. There is no easy way to generate a merged crash/driver dataset for analytic use.
Performance Measure	Integration	Increase the percentage of conviction records submitted to the DMV electronically.
Performance Measure	Integration	Increase the percentage of DMV driver records in which the notation of crash involvement is placed automatically (versus manually).
Performance Measure	Integration	D-I-1: The percentage of appropriate records in the driver file that are linked to another system or file (example: Driver in crash linked to adjudication file).
Deficiency	Accessibility	No reported deficiencies.
Performance Measure	Accessibility	D-X-1: To measure accessibility: Identify the principal users of the driver database, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.

Table 7.5 Citation/Adjudication System

	Data Quality	Citation/Adjudication Data
Deficiency	Timeliness	Courts, law enforcement agencies, and DMV would benefit from improved timeliness and accuracy supported by more field data collection of citation information.

	Data Quality	Citation/Adjudication Data
Performance Measure	Timeliness	Increase the percentage of citations sent to courts within 10 days.
Performance Measure	Timeliness	Increase the percentage of convictions sent to the DMV within 10 days of conviction.
Performance Measure	Timeliness	C/A-T-1: The median or mean number of days from a) the date a citation is issued to b) the date the citation is entered into the statewide citation database, or a first available repository.
Performance Measure	Timeliness	C/A-T-2: The median or mean number of days from a) the date of charge disposition to b) the date the charge disposition is entered into the statewide adjudication database, or a first available repository.
Deficiency	Accuracy	A quality control program for citation/adjudication data with measurable attributes does not exist.
Deficiency	Accuracy	Very limited electronic citation issuance statewide. Lack of DMV systems and documents (license and registration) using data linkage and automatic form completion possibilities for law enforcement officers in the field.
Performance Measure	Accuracy	Increase the percentage of citation locations that match statewide location coding.
Performance Measure	Accuracy	Decrease the percentage of errors found during citation data audits of critical data elements.
Performance Measure	Accuracy	C/A-A-1: The percentage of citation records with no errors in critical data elements (example: time citation issued).
Performance Measure	Accuracy	C/A-A-2: The percentage of charge disposition records with no errors in critical data elements (example: citation reference number).
Deficiency	Completeness	Lack of a secure, internet-accessible data collection portal to process and securely store data on discretionary traffic stops.
Deficiency	Completeness	Increase the percentage of citation records with no missing critical data elements.
Performance Measure	Completeness	C/A-C-1: The percentage of citation records with no missing critical data elements.
Performance Measure	Completeness	C/A-C-2: The percentage of citation records with no missing data elements.
Performance Measure	Completeness	C/A-C-3: The percentage of unknowns or blanks in critical citation data elements for which unknown is not an acceptable value.
Deficiency	Uniformity	There is no statewide repository for citations and there is no way to track how many cases are deferred statewide or how many convictions fail to make it to DMV. There is no single numbering system for citation forms.

	Data Quality	Citation/Adjudication Data
Performance Measure	Uniformity	Increase the percentage of citations contained within a single statewide data repository.
Performance Measure	Uniformity	C/A-U-1: The number of Model Impaired Driving Record Information System (MIDRIS)-compliant data elements entered into the citation database or obtained via linkage to other databases.
Performance Measure	Uniformity	C/A-U-2: The percentage of citation records entered into the database with common uniform statewide violation codes.
Deficiency	Integration	Oregon does not have a statewide Citation Tracking System to contain data on the life cycle of all citations issued and adjudicated in the state.
Deficiency	Integration	Oregon Judicial Information Network (OJIN) requires improvement with an up-to-date case management system (CMS). All courts in Oregon should use the upgraded CMS to transfer citations electronically to the driver file.
Deficiency	Integration	Oregon is lacking the linkage between the Citation/Adjudication Data Component and other components of the State's Traffic Record System.
Deficiency	Integration	Oregon is lacking an interface between DMV and courts to receive electronic convictions.
Deficiency	Integration	Very limited electronic citation issuance statewide. Lack of DMV systems and documents (license and registration) using data linkage and automatic form completion possibilities for law enforcement officers in the field.
Deficiency	Integration	Very few agencies are able to send data electronically to the courts.
Performance Measure	Integration	Increase the number of citations that are distributed from law enforcement agencies to local courts electronically.
Performance Measure	Integration	C-I-1: The percentage of appropriate records in the citation file that are linked to another system or file (example: DWI citation linked to Adjudication file).
Deficiency	Accessibility	Outreach is needed to educate judges on how to access the state's driver file.
Deficiency	Accessibility	Minimal use of automation for data collection and on-line data retrieval for citations.
Performance Measure	Accessibility	Increase the percent of law enforcement agencies using on-line citation data system for data retrieval and statistical reports.
Performance Measure	Accessibility	C/A-X-1: To measure accessibility of the citation database: Identify the principal users of the citation database, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.

**Table 7.6 Injury Surveillance System**

	Data Quality	Injury Surveillance Data
Performance Measure	Timeliness	Increase the percentage of EMS run reports submitted to OR-EMIS within 24 hours of Unit Back in Service Datetime.
Performance Measure	Timeliness	I-T-1: The median number of hours from the datetime of an EMS Unit Back In Service to the datetime when the electronic patient care report (ePCR) is created in OR-EMIS.
Performance Measure	Timeliness	I-T-2: The percentage of ePCRs entered into OR-EMIS within 24 hours from datetime of EMS Unit Back in Service.
Performance Measure	Timeliness	The percentage of ePCRs entered into OR-EMIS within 24 hours from datetime of EMS Unit Back in Service.
Performance Measure	Timeliness	Increase the percentage of trauma records completed in the Oregon Trauma Registry within 60 days of hospital discharge date.
Performance Measure	Timeliness	The percentage of trauma records completed in the Oregon Trauma Registry within 60 days from hospital discharge date.
Performance Measure	Accuracy	Percentage of Oregon Trauma Registry records with a valid trauma band number that was distributed by the Oregon EMS & Trauma Systems Program.
Performance Measure	Completeness	Percentage of Oregon Trauma Registry records transported by EMS with documented Trauma Criteria.
Performance Measure	Uniformity	The percentage of EMS patient care reports with properly formatted values for required date time elements (list included elements here)
Performance Measure	Uniformity	EMS record uniformity measures for mandatory elements referencing value lists and patterns in the state dataset (EMS data quality dashboard)
Performance Measure	Uniformity	Trauma record uniformity measures for mandatory elements referencing picklists and patterns in the state dataset.
Deficiency	Completeness	The EMS, inpatient, and outpatient hospital databases are not currently used to identify all persons treated as the result of a motor vehicle crash.
Deficiency	Completeness	Encourage GPS and/or map-based location coding for EMS run report data collection.
Performance Measure	Completeness	EMS record completeness measures for mandatory elements referencing the state dataset (EMS data quality dashboard)

	Data Quality	Injury Surveillance Data
Performance Measure	Completeness	Trauma record completeness measures referencing the state dataset and Exhibit 2 &3 (Exhibit 2 &3 Issue Filter Report)
Performance Measure	Uniformity	I-U-1: The percentage of records in OR-EMSIS that are National Emergency Medical Service Information System (NEMSIS)-compliant.
Performance Measure	Uniformity	I-U-2: The number of records on the State EMS data file that are National Emergency Medical Service Information System (NEMSIS) – compliant.
Performance Measure	Uniformity	The number of records in OR-EMSIS that are National Emergency Medical Service Information System (NEMSIS) – compliant.
Performance Measure	Uniformity	The number of records in the Oregon Trauma Registry that are National Trauma Data System (NTDS) – compliant.
Performance Measure	N/A	Production of the biennial Oregon Trauma Registry report.
Performance Measure	N/A	Production of the annual OR-EMSIS report.
Performance Measure	Integration	The percentage of records in the Oregon Trauma Registry where the patient arrived by EMS that document an ePCR number and/or UUID.
Performance Measure	Integration	Increase the percentage of traffic-related EMS injury runs that can be precisely linked to crash reports.
Performance Measure	Integration	Percentage of records in the Oregon Trauma Registry where the patient was transferred in which the origination or destination hospital are properly documented with facility code.
Performance Measure	Integration	Percentage of ePCRs in OR-EMSIS where the patient was transferred in which the origination or destination hospital are properly documented with facility code.
Performance Measure	Integration	The percentage of OR-EMSIS records which document an impression indicating injury with Possible Injury = “Yes”
Performance Measure	Integration	The percentage of OR-EMSIS records for traumatic injury that document a Trauma Band Number.
Performance Measure	Integration	The percentage of OR-EMSIS records for traumatic injury that document outcomes from the Oregon Trauma Registry.



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	Data Quality	Injury Surveillance Data
Performance Measure	Accessibility	I-X-1: To measure accessibility of the EMS file: Identify the principal users of the file, query the principal users to assess a) their ability to obtain the data or other services requested and b) their satisfaction with the timeliness of the response to their request, document the method of data collection and the principal users' responses.
Deficiency	N/A	A member of the Injury and Violence Prevention Program is not currently a member of the TRCC.
Deficiency	N/A	A member of the EMS & Trauma Systems Program is not currently a member of the TRCC.

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