Oregon Traffic Records
Strategic Plan

Federal   Fiscal   Year   2020

Oregon
Transportation
Plan Update

Oregon Traffic Records Strategic Plan

Federal Fiscal Year 2020

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1.0   Requirements for a Traffic Records Strategic Plan

The Moving Ahead for Progress in the 21st century (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act) outlines 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.

2.0   2016 Traffic Records Assessment

In 2015, the TRCC requested and participated in a Traffic Records Assessment conducted by the National Highway Traffic Safety Administration (NHTSA) Technical Assessment Team. Unlike the previous Traffic Records Assessment conducted in 2010, this time a team did not visit the state but 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

Over three time periods, 391 questions were asked of Oregon, and based on the answers provided, our 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 391 assessment questions, Oregon met the assessment ideal for 159 questions (40.7 percent), partially met the ideal for 63 questions (16.1 percent), and did not meet the ideal for 169 questions (43.2 percent). The percentages for each assessment module for meeting the ideal are broken out below:

- Traffic Records Coordinating Committee Management – 57.9 percent of the ideal.

- Strategic Planning – 6.3 percent of the ideal.

- Crash Data – 56.8 percent of the Ideal.

- Vehicle Data – 33.3 percent of the ideal.

- Driver Data – 53.3 percent of the ideal.

- Roadway Data – 57.9 percent of the ideal.

- Citation / Adjudication Data – 11.1 percent of the ideal.

- EMS / Injury Surveillance Data – 44.7 percent of the ideal.

- Data Use and Integration – 15.4 percent of the Ideal.

It is important to note that no state can currently achieve 100 percent of NHTSA's ideal standard. In fact, Oregon's overall score for the assessment came in at 66.2 percent, which is near the average score of 67.4 percent for the 29 other states who had completed the assessment at the time of the report. 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 1 summarizes the priority recommendations from the assessment.

Table 2.1   Traffic Records Assessment Priority Recommendations

Data System	Things to Improve[a]
Strategic Planning Recommendations	Strengthen the TRCC's abilities for strategic planning to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Crash	Improve the procedures/ process flows for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Vehicle	Improve the applicable guidelines for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Driver	Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Roadway	Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Data System	Things to Improve[a]
Citation/Adjudication	Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
	Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
EMS/Injury Surveillance	Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
Data Use and Integration	Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Program Assessment Advisory.

[a]   To reflect best practices identified in the Traffic Records Program Assessment Advisory.

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)

The Oregon DOT is currently developing a plan to collect or obtain all of the missing data elements from local agencies currently not collected for the MIRE Fundamental Data Elements (FDE) on all public roads. A study has been performed to determine these missing elements which are now driving the development of this plan for collecting the remaining FDEs. The Oregon DOT anticipates that this plan will be completed by 2018.

3.2 Traffic Records Coordinating Committee

- Doug Bish, ODOT Traffic Roadway Section, Roadway, Chair

- Joseph Marek, Clackamas County Traffic Engineering, Roadway, Vice Chair

- Jovi Anderson, City of Bend, Roadway

- Troy Costales, ODOT Transportation Safety Division, Strategic Planning

- Linda Beukens, Oregon DMV, Vehicle and Driver

- Laurel Boyd, OHA Public Health Division, EMS/ Injury Surveillance

- Jess Brown, ODOT Motor Carrier Transportation Division, Vehicle and Driver

- Vincent Jarmer, Port of Portland Law Enforcement, Crash and Citation/ Adjudication

- Chris Wright, ODOT Transportation Data Section, Crash and Data Integration

- Rod Kamm, ODOT Information Systems Branch, Crash

- Lt. Patrick Huskey, Oregon State Police, Crash and Citation/ Adjudication

- Shirley Wise, National Highway Traffic Safety Administration (non-voting member)

- Nick Fortey, Federal Highway Administration (non-voting member)

- Walter McAllister, ODOT Transportation Safety Division, Traffic Records Management and Strategic Planning, Traffic Records Program Manager

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:

- Interviews with data collectors, users, and system managers of traffic records data throughout the state.

- 2016 Traffic Records Assessment Report.

- 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 the TRCC.

3.5   Review of Traffic Records Assessment

Led by the consultant, members of the TRCC organized a thorough review of the 2016 Traffic Records Assessment report completed in the State. Additionally, a review was conducted of the Traffic Records

Strategic Plan, FFY 2017 Highway Safety Plan (HSP), Oregon Transportation Plan, Rail Plan, Bicycle and Pedestrian Safety Plan, Oregon EMS Data Strategic Plan, and the Oregon Traffic Safety Action Plan to review and compile all data related performance measures noted in various statewide 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.

The matrix incorporated the findings noted as *does not meet* or *partially meets* from the most recent Traffic Records Assessment (Assessment) conducted in the State. The findings were then cross-referenced with the current Traffic Records Strategic Plan and any other strategic plans in the State that contain traffic records related performance measures that line up with any of the findings.

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). Members for each of these categories were surveyed for every data system (crash, vehicle, driver, roadway, citation/ adjudication, EMS/ 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

- Troy Costales, Governor's Representative, Strategic Planning

- Traci Pearl, Highway Safety Section Manager, Strategic Planning

- David Ringeisen, Transportation Data Section Manager, Crash and Data Integration

- Dan Wells, GIS Data Systems, Crash

- Robin Ness, Crash Analysis and Reporting Manager, Crash

- Lana Tribbey, DMV Customer Services Group Manager, Vehicle and Driver

- Tracy Olander, DMV Program Services, Vehicle

- William Merrill, DMV Program Services, Driver

- Joseph Marek, Traffic Engineer, Roadway

- Doug Bish, Traffic Engineer, Roadway

- Heather King, Transportation Data Section, Roadway

- Kimberly Dailey, State Court Administration, Citation/ Adjudication

- Melissa Franz, State Court Administration, Citation/ Adjudication

- James Conlin, Deputy Chief Information Officer, Citation/ Adjudication

- Dagan Wright, EMS Trauma Systems, EMS/ Injury Surveillance

- Lisa Millet, EMS Trauma Systems, EMS/ 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 will be compiled, analyzed, and documented by the consultant.

3.6.1   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. Although findings may be labeled a medium or low priority they could be elevated to high priority within a year or two once other accomplishments have been achieved. As priorities evolve and benchmarks are achieved for high priority findings they will trigger the prioritization of others.

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 all of the Traffic Records Assessment findings and their prioritization.

Table 4.1   High Priority

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Traffic Records Coordinating Committee Management					
Does the TRCC identify core system performance measures and monitor progress?	Partially Meets	Performance measures for all core areas are included in the strategic plan but do not appear to include goals or baselines. The Oregon DOT Traffic Safety Performance Plan also contains traffic records performance measures which do include goals and baselines. However, it is unclear how often progress is measured or reported to the TRCC. The question specifies that the TRCC identify and track performance measures over time, and provide evidence of the tracking of at least one performance measure for each of the six core systems. There has been no documentation provided which demonstrates the tracking or ongoing monitoring of performance measure data for either plan.			By FFY 2018 all core system managers will report out to the TRCC performance measures to monitor the progress at least once per year.
Strategic Planning					
Does the TRCC strategic plan address existing data and data systems deficiencies and document how these deficiencies are identified?	Partially Meets	The strategic plan includes a comprehensive list of deficiencies by data system component, presumably pulled directly from the 2010 traffic records assessment. However, the plan does not provide any details for addressing the deficiencies listed in the plan.			The new strategic plan involved interviews of key stakeholders for all data systems for addressing the deficiencies from the latest Traffic Records Assessment.
Does the TRCC strategic plan identify strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems?	Partially Meets	The "Phases of the Strategic Plan" section outlines a series of strategies for realizing improvements to the State's traffic records system. Nevertheless, these strategies do not link the underlying deficiencies and the performance attributes intended to be impacted. The State would be well-served creating a seamless link from deficiencies, to strategies, to projects, to intended impact. This would allow the TRCC to more clearly define problems and connect the performance solutions intended to address those problems.			The new strategic plan involved interviews of key stakeholders for all data systems for addressing the deficiencies from the latest Traffic Records Assessment.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Strategic Planning					
Does the TRCC have a process for identifying and addressing technical assistance and training needs in the TRCC strategic plan?	Does Not Meet	The strategic plan document does not account for technical assistance and training needs. Although action plans would necessarily require training, none explicitly list those underlying needs. As a result, it appears the TRCC does not have a defined process for addressing traffic records-related technical assistance and training needs. Additional focus on technical resources at both the State and Federal level, as well as training for TRCC participants and stakeholders, will add an important component to Oregon's overall strategy in traffic records.			The TRCC will explore opportunities to request a Traffic Records Go Team to come to Oregon to provide technical assistance and training to address deficiencies in the traffic record(s) system.
Crash					
Do all law enforcement agencies collect crash data electronically?	Partially Meets	The State has been evaluating 100% electronic reporting as a future project for several years. Oregon's DMV is modernizing their efforts to move electronically and once completed, they should be able to accept the PAR's electronically and that will enable the Crash Data System to do the same. Currently, only about 25% of Oregon Law Enforcement was provided eCitation and eCrash software via grants and Oregon's State Police are at 100% eCite/eCrash.	3 years or more	Robin Ness	Develop a plan or agreement with the DMV to receive crash reports electronically.
Does the crash system interface with the driver system?	Does Not Meet	While the crash and driver systems are not integrated, the State has the capability to link information through the use of a common accident record number.	3 years or more	Robin Ness	Develop a plan or agreement with the DMV to receive crash reports electronically.
Does the crash system interface with the vehicle system?	Does Not Meet	Oregon's crash system does not currently interface with the State's vehicle system.	3 years or more	Robin Ness	Develop a plan or agreement with the DMV to receive crash reports electronically.
Do all law enforcement agencies collect crash data electronically?	Partially Meets	The State has been evaluating 100% electronic reporting as a future project for several years. Oregon's DMV is modernizing their efforts to move electronically and once completed, they should be able to accept the PAR's electronically and that will enable the Crash Data System to do the same. Currently, only about 25% of Oregon Law Enforcement was provided eCitation and eCrash software via grants and Oregon's State Police are at 100% eCite/eCrash.	3 years or more	Robin Ness	Develop a plan or agreement with the DMV to receive crash reports electronically.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Vehicle					
Are vehicle registration documents barcoded – using at a minimum the 2D standard – to allow for rapid, accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners?	Does Not Meet	Registration documents are not barcoded at this time.	2-3 years.	Lana Tribbey	By June 1 of 2019 10% of vehicle registrations will have the minimum 2D barcoded standard.
Does the vehicle system query the National Motor Vehicle Title Information System (NMVTIS) before issuing new titles?	Does Not Meet	The Oregon DMV currently does not query the National Motor Vehicle Titling Information System for vehicle information prior to issuing a title.	2-3 years.	Lana Tribbey	Once the new DMV system goes live, 100% of vehicle titles issued will be queried through the National Motor Vehicle Titling Information System.
Does the State incorporate brand information on the vehicle record that are recommended by AAMVA and/or received through NMVTIS, whether or not the brand description matches the State's brand descriptions?	Does Not Meet	Oregon has established its own title brands and does not currently use the AAMVA- or NMVTIS-recommended brands. Out-of-state brands are recorded and carried over to Oregon when the vehicle is titled.	2-3 years.	Lana Tribbey	Once the new DMV system goes live this assessment finding will be satisfactorily achieved.
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	No data quality management reports are provided to the TRCC for the vehicle data system.		Lana Tribbey	To improve the average annual timeliness of the vehicle titles entered into the system from 26 days. This will be reported to the TRCC on an annual basis. The TRCC may consider setting a performance measure at a later date.
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 DMV is not providing vehicle information to the National Motor Vehicle Titling Information System (NMVTIS). Oregon is going through a revision of its data systems and could include this function as a future project.	2-3 years	Lana Tribbey	Once the new DMV system goes live this assessment finding will be satisfactorily achieved.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Does the vehicle system have a documented definition for each data field?	Partially Meets	Oregon's vehicle system has not been documented within a single, comprehensive data dictionary that contains data definitions for each field. However, definitions for each data entry field and the associated key are included in documented procedures. The State has provided representative samples of data entry procedures that include data definitions matched to corresponding fields on a line-by-line, field-by-field basis.	2-3 years	Lana Tribbey	Once the new DMV system goes live this assessment finding will be satisfactorily achieved as having a documented definition for each data field.
Vehicle					
Does the vehicle system include edit check and data collection guidelines that correspond to the data definitions?	Does Not Meet	The vehicle data system verifies information through data tables and field data type constraints built into the system. Formal definitions do not exist.	2-3 years	Lana Tribbey	Once the new DMV system goes live this assessment finding will be satisfactorily achieved as having a documented definition for each data field.
Driver					
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	Data quality reporting is done for the DMV units. This information is not shared with the TRCC.		Lana Tribbey	To improve the average annual timeliness of the convictions added to the driver file once received by the DMV from law enforcement entered into the system from 14 days. This will be reported to the TRCC on an annual basis. The TRCC may consider setting a performance measure at a later date.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Roadway					
Is there a set of established performance measures for the accuracy of the State enterprise roadway information system?	Does Not Meet	The State does not have performance measures for the accuracy of the State enterprise roadway information system. It appears that the State could easily measure accuracy as they are currently assessing accuracy based on field verification of sample sections. From the FHWA Performance Measures for Roadway Data, one metric is, "The percentage of all road segment records with no errors in critical data elements. (The State selects one or more roadway data elements it considers critical and assesses the accuracy of that element or elements in all of the roadway records within a period defined by the State.) An additional metric identified in the same document is, "Percentage of critical roadway inventory elements whose attribute values are within reasonable ranges and/or are consistent with related variables." The State should consider adopting a performance measure like this to evaluate their enterprise system data accuracy.	Ongoing	Heather King	Resolution of 100% of validation errors before new data items are used for analysis.
Roadway					
Are all the MIRE Fundamental Data Elements collected for all public roads?	Does Not Meet	The State currently collects or can generate the majority of the MIRE Fundamental Data Elements (FDEs) on the State highway system, but not on all public roads. A study has been performed to determine the required elements to run Safety Analyst and a plan is being developed to collect or obtain the data elements from local agencies. Oregon should consider viewing the full MIRE FDE list to determine if it should add and collect any or all of these FDE data elements on a statewide basis for all public roads in the future.		Doug Bish	Collect all of the FDEs for signalized intersections by 2022.
Citation/Adjudication					
Is there a set of established performance measures for the accuracy of the citation systems?	Does Not Meet	There are no accuracy measures nor is there a statewide citation tracking system. The State has not described a set of established performance measures for the accuracy of the citation systems.		TBD	Develop a better understanding and development of the citation and adjudication system.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Is there a set of established performance measures for the accuracy of the adjudication systems?	Does Not Meet	Oregon does not have a specific set of performance measures for the accuracy of the adjudication systems. However, they are working on Oregon eCourt to reduce the number of data entry errors. Oregon eCourt's Strategic Plan and Program Charter proposes several quantifiable measures for the overall goals of the program. No information is available regarding the local courts.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the timeliness of the citation systems?	Does Not Meet	The State has not described a set of established performance measures for the timeliness of the citation systems.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the completeness of the citation systems?	Does Not Meet	The State has not described a set of established performance measures for the completeness of the citation systems.		TBD	Develop a better understanding and development of the citation and adjudication system.
Citation/Adjudication					
Is there a set of established performance measures for the uniformity of the citation systems?	Does Not Meet	The State has not described a set of established performance measures for the uniformity of the citation systems.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the integration of the citation systems?	Does Not Meet	There are several citation tracking systems, but no integration measures for one of them were provided.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the timeliness of the adjudication systems?	Partially Meets	The Circuit Courts have timeliness measures for their tracking system. No information is provided for the local courts or other systems.		TBD	Develop a better understanding and development of the citation and adjudication system.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Is there a set of established performance measures for the completeness of the adjudication systems?	Does Not Meet	The State does not currently have a set of established performance measures for the completeness of the adjudication systems; however, development of exception reporting is underway to identify common errors at case disposition.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the integration of the adjudication systems?	Does Not Meet	The State does not have an established set of performance measures for the integration of the adjudication systems.		TBD	Develop a better understanding and development of the citation and adjudication system.
Is there a set of established performance measures for the accessibility of the citation systems?	Does Not Meet	The State has not described a set of established performance measures for the accessibility of the citation systems.		TBD	Develop a better understanding and development of the citation and adjudication system.
EMS/Injury Surveillance					
Does the EMS system track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	Partially Meets	The State EMS system is able to track frequency, nature, and severity of traffic-related injuries by Glasgow Coma Scores (GCS), but no other indication of severity or nature of injury was provided and GCS scores are missing for about two-thirds of the cases.	1-2 years	Dagan Wright	The percentage of licensed transporting agencies submitting NEMSIS version 3 data in a given month reaches 70% in the 4th quarter of 2017 and 100% in the 4th quarter of 2018.
Are there timeliness performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no timeliness performance measures in place for the EMS data although submissions are tracked by agency staff.	2 years	Dagan Wright	The median number of hours that it takes for a NEMSIS version 3 patient care report to be received by the state data system (from the time the EMS unit was notified to respond to the call) in a given month will be 12 hours or less by the 4th quarter of 2018.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Are there accuracy performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no accuracy performance measures in place for the EMS system.		Dagan Wright	The percentage of licensed transporting agencies submitting NEMSIS version 3 data in a given month reaches 70% in the 4th quarter of 2017 and 100% in the 4th quarter of 2018.
Are there completeness performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no completeness performance measures for the EMS system. Performance measures are used to measure the health and progress of the system. Although 100% completeness is required for successful submission, performance measures should be implemented for continual evaluation of the system despite automated standards.		Dagan Wright	The number of EMS personnel who have completed licensure using the new system to 8,000 by the 2nd quarter of 2017.
EMS/Injury Surveillance					
Are there uniformity performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no uniformity performance measures for all EMS reports in the State. Performance measures provide a gauge that allows a state to measure the improvement of their data systems. Although all records must conform to NEMSIS requirements, uniformity measures should be implemented for State-specific elements and continual evaluation of the system as NEMSIS evolves.		Dagan Wright	The percentage of licensed transporting agencies submitting NEMSIS version 3 data in a given month reaches 70% in the 4th quarter of 2017 and 100% in the 4th quarter of 2018.
Are there integration performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no integration performance measures for the EMS system.		Dagan Wright	The number of hospitals and EMS agencies with people trained to use the integration features will reach 60 by the 3rd quarter of 2017.
Are there accessibility performance measures tailored to the needs of EMS system managers and data users?	Does Not Meet	There are no accessibility performance measures for the EMS system. Accessibility performance measures track the ability of principal users of the data to obtain the data or other services and their satisfaction.		Dagan Wright	A data request tracking system has been adopted by state staff in 2017.

Assessment Question	Rating	Assessor Conclusion	Timeline	Leader	Subject Matter Expert Comments
Are high frequency errors used to update EMS system training content, data collection manuals, and validation rules?	Partially Meets	High frequency errors are not used to update training content, data collection manuals, and validation rules. However, common lessons learned from the data and feedback from EMS providers is used to revise those materials. This feedback is not databased, but informal.		Dagan Wright	Publication of a performance improvement framework and toolkit on the EMS web site by the 4th quarter of 2018.
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.		Dagan Wright	Will make incident location information and time or date reports available to the TRCC on an annual basis, while still maintaining HIPPA compliance.
EMS/Injury Surveillance					
Are vital records data quality management reports produced regularly and made available to the State TRCC?	Does Not Meet	Data is provided to the FARS analyst, but no data quality management reports are provided to the TRCC.		Dagan Wright	Look into creating a report to provide the "injury" and general demographics specific report from the vital records for completeness that were transportation related on an annual basis to the TRCC.
Are periodic comparative and trend analyses used to identify unexplained differences in the emergency department and hospital discharge data across years and agencies?	Partially Meets	The State utilizes a Query Wizard that enables them to conduct analyses, but the frequency and details of how those analyses are done to identify the unexplained differences were unclear.	2 years	Dagan Wright	Will report a comparative and trend analysis report on emergency departments and discharge data on an annual basis to the TRCC.
Data Use and Integration					
Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?	Partially Meets	Although there is little current integration across systems, the TRCC strategic plan promotes data integration, including performance measures, and linking crash data with other data systems or files.			Make integration a consideration for 100% of funding decisions of the TRCC. Ask Doug Bish.

Table 4.2   Medium Priority

Assessment Question	Rating	Assessor Conclusion	Timeline
Traffic Records Coordinating Committee Management			
Does the TRCC use a variety of federal funds to strategically allocate resources for traffic records improvement projects?	Partially Meets	Oregon utilizes federal 408 funding in addition to 405(c) funding for traffic records improvement projects and cited several projects spanning across several core component areas which utilized both federal funding sources. There are a number of other federal funding sources that are available which can be utilized for traffic records improvement efforts including funds from FHWA and FMCSA. Consideration should be given to exploring these, and other potential funding sources for traffic records projects in addition to the NHTSA funding which is traditionally available.	
Does the TRCC have a traffic records inventory?	Does Not Meet	Oregon does not have a statewide traffic records inventory. It appears that some progress is being made towards compiling a more complete inventory. It would be beneficial for Oregon to continue to pursue a traffic records inventory moving forward-- complete with data elements, attributes, definitions, and other components that would be helpful to traffic records professionals in the State. A comprehensive traffic records inventory is a useful and pragmatic document to ensure that efforts are not duplicated and data is accessible to those who need it to make good decisions. The State is to be commended for its work in this area and encouraged to continue these efforts.	
Does the TRCC address technical assistance and training needs?	Partially Meets	The State TRCC was proactive in assessing and providing training in conjunction with EMS data improvement initiatives. The example provided was a project authorized by the TRCC which included NEMSIS training. Consideration should be given to conducting a training needs assessment which would be utilized to identify the overall needs of traffic records system users across all core component areas. In addition, adding a topic to each meeting to discuss training needs would assist in satisfying this Advisory ideal.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Strategic Planning			
Does the TRCC strategic plan indicate what funds are used to undertake efforts detailed in the plan and describe how these allocations contribute to the plan's stated goals?	Does Not Meet	The strategic plan does not contain project-level information, precluding the ability to determine how funding decisions contribute to the identified strategies. The utility of the strategic plan would increase substantially with the inclusion of a 'projects' section detailing items such as the purpose, anticipated costs, and planned funding sources. The State should include federal funding and, to the extent feasible, State funding attributed to improvement projects.	
Does the TRCC have a process for prioritizing traffic records improvement projects in the TRCC strategic plan?	Does Not Meet	While the plan distinguishes some items of action as either immediate, near term, or long term, these categories are not synonymous with priority. For instance, some long term action plans may actually be of greater value; thus, they would be prioritized higher than many near term actions. In light of this, it appears that the strategic plan does not contain a priority structure based on an approach agreed upon by the TRCC.	
Does the TRCC have a process for identifying performance measures and corresponding metrics for the six core data systems in the TRCC strategic plan?	Does Not Meet	The plan lists numerous traffic records system performance measures, including all 61 measures from Model Performance Measures for State Traffic Records Systems. However, none of the measures include baselines or targets, nor does the plan include a description of the TRCC's performance management efforts. Consequently, it does not appear that the TRCC has a process for identifying performance measures and monitoring corresponding metrics over time.	
Does the TRCC have a process for establishing timelines and responsibilities for projects in the TRCC strategic plan?	Does Not Meet	Because the plan does not include project-level information, no details around timelines and responsibilities are listed. Ultimately, the State will benefit from a concerted effort to include project development in its planning process and describe selected projects within the strategic plan. This will allow the TRCC to establish a more structured process for identifying candidate projects and their associated timelines and responsibilities.	
Does the TRCC have a process for leveraging federal funds and assistance programs in the TRCC strategic plan?	Does Not Meet	The traffic records strategic plan does not currently include fiscal details for prioritized improvement projects. As a result, there is no clear description of how the TRCC leverages federal funding and other technical assistance programs. While the Oregon Traffic Safety Performance Plan indicates the State receives NHTSA Section 405(c) funding and invests that funding in improvement projects, the traffic records strategic plan should clearly describe the projects the State is investing in to improve traffic records.	
Is the strategic plan responsive to the needs of all stakeholders, including local users?	Partially Meets	While the assumption could be made that based on TRCC membership the plan responds to the needs of stakeholders, the plan itself does not explicitly discuss how these needs are being met. However, it is clear that the phases and steps outlined in the plan address at least some stakeholder needs, including local users.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Crash			
Do all law enforcement agencies collecting crash data electronically apply validation rules that are consistent with those in the statewide crash system prior to submission?	Does Not Meet	The crash reporting software application does not apply validation rules consistent with those in the statewide repository. There are indications that the State has plans to incorporate these validation rules at some point in the future.	
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	Neither ODOT or law enforcement agencies have the resources or time for returning rejected crash reports to the originating officer and tracking resubmission of the reports. This is a process which should be automated.	
Are there timeliness performance measures tailored to the needs of data managers and data users?	Does Not Meet	Although Oregon's Traffic Records Strategic Plan lists the crash timeliness measures recommended in Model Performance Measures for State Traffic Records Systems, the plan does not list any baselines or targets for these measures. As a result, it does not appear that the State has crash timeliness measures tailored to the needs of managers and users.	
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have accuracy performance measures. While the State says the data accuracy goals are tailored to meet the agencies' and other data users' needs, no performance measures were supplied.	
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have completeness performance measures. While the State says the data completeness goals are tailored to meet the agencies' and other data users' needs, no performance measures were supplied.	
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. While the State says the data uniformity goals are tailored to meet the agencies' and other data users' needs, no performance measures were supplied.	
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have integration performance measures. While the State says the data integration goals are tailored to meet the agencies' and other data users' needs, no performance measures were supplied.	
Has the state established numeric goals—performance metrics—for each performance measure?	Does Not Meet	While Oregon's Traffic Records Strategic Plan lists all of the performance measures recommended in Model Performance Measures for State Traffic Records Systems, the plan does not establish numeric goals for any of the measures. The TRCC would be well-served to establish numeric goals for traffic records performance measures similar to those established for broader traffic safety performance.	
Is there performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency?	Does Not Meet	While the State does report annually on their observation of the weaknesses and strengths of law enforcement agency reporting, no performance reporting that provides specific timeliness, accuracy, and completeness feedback at an agency level was provided.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Crash			
Are data quality management reports provided to the TRCC for regular review?	Does Not Meet	ODOT does not currently provide the TRCC with any data quality management reports for their review.	
Does the crash system interface with the citation and adjudication systems?	Does Not Meet	The crash and citation systems are not currently integrated; however, there are E-Citation and E-Crash programs in use by numerous law enforcement agencies that could provide a linkage in the near future.	
Does the crash system interface with the injury surveillance system?	Does Not Meet	The crash and injury surveillance systems are not currently integrated. However, the State is providing raw crash data to the injury surveillance system users for the purpose of integration and evaluation with an ongoing goal to establish the necessary links.	
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State does not have accessibility performance measures. While the State says the data accessibility goals are tailored to meet the agencies' and other data users' needs, no performance measures were supplied.	
Vehicle			
Are VIN, title number, and license plate number the key variables used to retrieve vehicle records?	Partially Meets	Vehicle records may be retrieved by VIN or license plate number. The title number is not a key variable for retrieving vehicle records. Title number is retained on the vehicle record, but cannot be used to retrieve records.	2-3 years.
Is the vehicle system data processed in real-time?	Does Not Meet	Vehicle records are updated nightly by batch files. Titling is not done in real-time.	2-3 years.
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?	Partially Meets	Data entry is verified through table look-ups, but the process was not explained.	2-3 years.
Are there timeliness performance measures tailored to the needs of data managers and data users?	Partially Meets	The Daily Service Level Report provided was more like a productivity report. The document identifies the expected time to complete a process and the actual time it took to complete a process, but does not satisfy the expectation for a data quality performance measure.	
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	There are no uniformity performance measures for the vehicle data system.	
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State has no integration performance measures for the vehicle system.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Vehicle			
Has the State established numeric goals—performance metrics—for each performance measure?	Does Not Meet	There are no metrics for performance, as there are no performance measures or stated goals.	
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	Feedback is provided to employees when errors occur and system enhancements are sometimes based of frequent errors. However, no formal methodology or process is described by which high frequency errors are detected and subsequently utilized to generate new training content and data collection manuals, update validation rules, or prompt form revisions.	
Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	Does Not Meet	Oregon uses no comparative or trend analyses, which are helpful for locating data errors, but also provide valuable information for traffic safety changes. Having more registered motorcycles could indicate the need to update motorcycle safety efforts, for example.	
Are the driver and vehicle files unified in one system?	Does Not Meet	The driver and vehicle files are not unified in one system.	3-4 years.
Can vehicle system data be used to verify and validate the vehicle information during initial creation of a citation or crash report?	Does Not Meet	Law enforcement can access DMV vehicle information through the Law Enforcement Data System (LEDS). The response implied that vehicle information could "potentially" be validated to create a citation. No information was provided to indicate this was standard operating procedure for law enforcement.	2-3 years.
Are independent sample-based audits conducted periodically for vehicle reports and related database contents for that record?	Does Not Meet	Independent sample-based audits of the vehicle system are not performed.	
When discrepancies are identified during data entry in the crash data system, are vehicle records flagged for possible updating?	Does Not Meet	Oregon does not record vehicle information from a crash report at the DMV.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Driver			
Are all valid field values—including null codes—documented in the data dictionary?	Does Not Meet	Oregon DMV does not maintain an official data dictionary, and the content of the driver system has not been documented with data definitions for all valid field values.	At least 2-3 years.
Are there edit checks and data collection guidelines for each data element?	Does Not Meet	There is no official data dictionary nor guidelines for edit checks and data collection. There are plans to develop such guidelines, but no timetable for completion has been established. There are procedure manuals and documents.	At least 4 or more years.
Is there guidance on how and when to update the data dictionary?	Does Not Meet	Oregon DMV does not have an official data dictionary for the driver system or guidance for when a data dictionary should be updated. There are plans to create guidelines, but there is no timeline for completion of this project.	At least 4 or more years.
Can the State's crash system be linked to the driver system electronically?	Does Not Meet	Currently, the driver system and the crash system are not linked electronically. Oregon is in a 10-year process to update the driver system and hopes to establish such an electronic link. All reportable crashes are manually entered onto the driving record.	At least 2-3 years.
Can the State's citation system be linked to the driver system electronically?	Partially Meets	Chargeable citations are entered onto the driving record and maintained by the DMV. Most citation and conviction information is manually added to the driver license system. Oregon is working on a process to electronically update all the records. A limited number of agencies have the capability to electronically transfer citation information.	At least 5 years.
Are there timeliness performance measures tailored to the needs of data managers and data users?	Does Not Meet	The response addresses service performance, not timeliness performance measures.	
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	Each DMV location establishes its own accuracy standards. The response stated there are no official accuracy performance measures.	
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	Completeness performance measures have not been established. The DMV has established productivity measures.	
Are there uniformity performance measures tailored to the needs of data managers and data users?	Does Not Meet	The response does not address uniformity performance measures.	
Are there integration performance measures tailored to the needs of data managers and data users?	Does Not Meet	Integration performance measures have not been established.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Driver			
Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?	Does Not Meet	Comparative and trend analyses are done annually during Oregon's FTE analysis and for budget reasons. It is unclear how this analysis identifies unexplained differences in the data across years and jurisdictions.	
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	Accessibility performance measures have not been established.	
Roadway			
Is there a set of established performance measures for the completeness of the State enterprise roadway information system?	Partially Meets	The State does not have performance measures for the completeness of the State enterprise roadway information system. It appears that the State collects the necessary data to establish a performance measure for completeness. One measure of completeness is, "The percentage of public road miles or jurisdictions identified on the State's base-map or roadway inventory file." It appears that the State may be doing this in an informal manner. The State makes every effort to capture all the State roadway data. Oregon depends on the various road owners to keep the State database complete and up-to-date. Different definitions of jurisdiction effect the issue of road ownership – crashes can occur on public vehicular areas which are not owned by the State or local authorities. This issue would have to be resolved; thus, the State receives a partially meets rating. The State should consider resolving this issue to make it easier to create a formal measure of completeness to meet this ideal.	
Do all additional collected data elements for any public roads conform to the data elements included in MIRE?	Does Not Meet	The State focuses most of its efforts on collecting federally-required data unless it is needed for a specific project or study. The State has identified some discrepancies between the HPMS definition of data elements and the MIRE definition. The additional data elements collected conform to the data elements included in MIRE with the exception of the identified discrepancies. Oregon should consider reviewing these data elements and whether to conform to the MIRE standard.	
Is there a set of established performance measures for the uniformity of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	Does Not Meet	The State does not have performance measures for the uniformity of the roadway data maintained by regional and local custodians. The State uses the FHWA certification of the HPMS data. HPMS requirements do not act as a substitute for actual performance measures. If the State defines and creates a State performance measure for the uniformity of the enterprise State data, the State should consider recommending the same or a similar performance measure to the local and regional agencies.	
Is there a set of established performance measures for the accessibility of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	Does Not Meet	The State does not have performance measures for the accessibility of the roadway data maintained by regional and local custodians. The State should consider working with the local agencies to help them develop performance measures of accessibility.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Can the State track citations from point of issuance to posting on the driver file?	Partially Meets	The State has described a system whereby citations filed by law enforcement in the Circuit Courts can be traced throughout the process, including posting on the driver file. The State is unable to track citations that are adjudicated by the local (municipal and justice) courts.	
Is the State able to track DUI citations?	Does Not Meet	The narrative and flowchart provided document the criminal and administrative DUI processes, identify all key stakeholders, and include dispositions per the criminal and administrative charges for Circuit Court processing of DUII diversion cases. DUII charges are filed in local courts in addition to Circuit Courts. Local courts use the same process illustrated in the attached diagram of the process for Circuit Courts. The flowchart shows no reporting to the DMV on two instances--No reporting to the DMV as to completion or non-completion is shown when the defendant is participating in the diversion program. Neither are not guilty findings reported.	
Does the DUI tracking system include BAC and any drug testing results?	Does Not Meet	There is no statewide DUI tracking system. The case management system does not include a field to enter the BAC or any drug testing results.	
Does the State track deferral and dismissal of citations?	Partially Meets	The business process chart that documents the deferral and the dismissal of citations is provided for the Circuit Courts. The Circuit Courts have the ability to track the deferral and the dismissal of citations. The response explains that at the conclusion of a case, court staff enter information about the disposition of the case, which could include whether the charges were dismissed, the defendant entered a DUII diversion program, or the defendant was convicted. The Department's business process for violation cases includes direction to court staff to enter information into the case management system when a charge is dismissed. The Judicial Department tracks dismissal of citations. This is done on a regular basis for accounting purposes. Additionally, individual Circuit Courts may track the number of diversion cases (i.e., deferral) as those particular cases require some court oversight and follow-up. The Department does not routinely compile statewide statistics on the number of diversions; however, the Department does have the capability to produce this data. All courts (circuit, justice, and municipal courts) are required by statute (ORS 813.230(2)) to notify the Department of Transportation when the court issues an order permitting a defendant to participate in diversion. Additional information regarding the local courts is needed. The local courts are important. It is even more important to understand their volume and practices if they are a place where citations go to die.	
Do the State's DUI tracking systems have additional quality control procedures to ensure the accuracy and timeliness of the data?	Does Not Meet	The State has not described quality control procedures to ensure the accuracy and timeliness of the data in the DUI tracking system.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Does the injury surveillance system include rehabilitation data?	Does Not Meet	Oregon maintains both a limited rehabilitation dataset and an all-pay and all-claims database, but neither dataset has been used for injury surveillance activities. The data is accessible but documentation was not available.	
Does the emergency department data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?	Partially Meets	Emergency department data related to traffic crash victims that are treated at trauma centers is available and tracks injury frequency and severity. Information related to other emergency departments, or if all EDs are designated trauma centers, was not available. While the ED dataset collects ICD9 codes that may be converted to AIS codes (a measure of severity), that is not currently being done.	
Is the emergency department data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Does Not Meet	Emergency department data is available for all 60 hospitals and is used to identify existing and emerging problems and to help allocate resources; however, the documentation provided does not relate directly to traffic-related injuries.	
Are there documented procedures for returning hospital discharge data to the reporting hospitals for quality assurance and improvement (e.g., correction and resubmission)?	Does Not Meet	There are no documented procedures for returning error records to the submitting agency and that process is the responsibility of the Oregon Hospital Association and its contracted vendor. State epidemiologists monitor and provide data quality feedback to hospitals, but it is not a formal documented process.	
Are there automated edit checks and validation rules to ensure that entered data falls within a range	Does Not Meet	Information related to the emergency department and hospital discharge data systems was not available.	
Are there formally documented processes for returning rejected emergency department and hospital discharge records to the collecting entity and tracking resubmission to the statewide emergency department and hospital discharge databases?	Does Not Meet	The hospital datasets (ED and inpatient) are managed by the Oregon Hospital Association and the State is not involved in the submission and data correction processes. Although the State notes an informal process used to identify errors in the Emergency Department data, no further information was available about either data system.	
Are there timeliness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	While there are reporting requirements, there are no timeliness performance measures for Emergency Department and Hospital Discharge databases.	
Are there accuracy performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	There are no accuracy performance measures for Emergency Department and Hospital Discharge databases. There are examples of the State measuring accuracy and using that to inform program changes, but no performance measures were developed.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Are there completeness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	There are no completeness performance measures for Emergency Department and Hospital Discharge databases. The completeness of E-codes has been measured over time, but performance measures with baseline and goal metrics have not been developed.	
Are there uniformity performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	There are no uniformity performance measures for Emergency Department and Hospital Discharge databases. Efforts have been made to compare State and national data, but performance measures are not included.	
Are there integration performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	There are no integration performance measures for Emergency Department and Hospital Discharge databases.	
Are there accessibility performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?	Does Not Meet	There are no accessibility performance measures for Emergency Department and Hospital Discharge databases. Accessibility performance measures track the ability of principal users to obtain the data or other services and their satisfaction.	
Is there performance reporting for the emergency department and hospital discharge databases that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	Does Not Meet	The hospital datasets (ED and inpatient) are managed by the Oregon Hospital Association and the State is not involved in the quality performance reporting processes. It is unclear if the Hospital Association provides information back to reporting hospitals for quality improvement efforts.	
Are high frequency errors used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules?	Does Not Meet	The hospital datasets (ED and inpatient) are managed by the Oregon Hospital Association. Although errors may be observed by analysts through their normal use of the data, there is no process by which the State uses those errors to update training materials.	
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?	Partially Meets	The State reportedly uses SAS code to conduct edit checks of the data, but it is unclear if this process is automated and occurs as data is being entered or if it is done on the back end.	
Is there an interface between the vital statistics and hospital discharge data?	Does Not Meet	Hospital discharge data and vital statistics data are linked in other Public Health Division programs, but there is no interface.	
Has the State established numeric goals—performance metrics—for each EMS system performance measure?	Partially Meets	Numeric goals are available and tracked for a limited number of performance measures (i.e. completeness).	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the emergency department and hospital discharge databases?	Partially Meets	The State conducts quality control reviews on the completeness of many elements in the Emergency Department data. It is also able to track the completeness of E-codes for persons with an injury diagnosis at the point of submission to the CDC, but there is no information about State-conducted quality control reviews of the accuracy and uniformity of the hospital databases.	
Is data quality feedback from key users regularly communicated to emergency department and hospital discharge data collectors and data managers?	Does Not Meet	It was reported that feedback on the quality of the Emergency Department data is provided back to the facility's IT department, but no details were available. Also, it is unclear if the same process is used for Hospital Discharge data or whether this information is relayed to the data collectors. This process is probably conducted by the Oregon Hospital Association.	
Are emergency department and hospital discharge data quality management reports produced regularly and made available to the State TRCC?	Does Not Meet	Data quality management reports for the ED and Hospital Discharge data are not regularly provided to the TRCC.	
Has the State established numeric goals—performance metrics—for each vital records performance measure?	Partially Meets	Metrics for timeliness and completeness performance measures were provided, but the State does not have performance measures. Although metrics are tracked regularly, they should be used to implement formal measures.	
Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?	Does Not Meet	NCHS and State-specific edits have been implemented in the system, but it is unclear if these are reviewed regularly and compiled in the form of quality control reports.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Data Use and Integration			
Does the State have a formal traffic records system inventory that identifies linkages useful to the State and data access policies?	Does Not Meet	Although the State's DOT maintains an inventory for the systems under their responsibility, the State does not have a formal traffic records systems inventory. A 2016 release to external customers of the DOT is planned. The TRCC should consider using this as a basis to expand and include inventories of other traffic records system components.	
Is driver data integrated with crash data for specific analytical purposes?	Does Not Meet	The State does not link crash and driver license data on a regular basis but has done so in the past to analyze crash involvement of unlicensed drivers. Further such linkages are encouraged.	
Is vehicle data integrated with crash data for specific analytical purposes?	Does Not Meet	The State does not link vehicle data with crash data.	
Is citation and adjudication data integrated with crash data for specific analytical purposes?	Does Not Meet	Although citation and crash data are not currently linked, the State is moving toward that possibility by incorporating electronic crash and citation applications.	
Is injury surveillance data integrated with crash data for specific analytical purposes?	Partially Meets	The State performed a one-month integration study linking EMS data to three statewide outcome databases: Hospital Discharge Database, Trauma Registry, and Department of Transportation Crash File. They were matched using probabilistic linkage software. The State is strongly encouraged to continue to pursue the linkage of crash and injury data.	
Are there examples of data integration among crash and two or more of the other component systems?	Does Not Meet	The State example of crash, roadway, and guardrail inventory linkage is a good example of data linkages among multiple systems. This question, however, asks about the core six traffic records component systems: citation/adjudication, crash, driver license, injury surveillance, roadway, and vehicle. If this example also included corresponding EMS times, or driver license status, for example, it would fully meet the ideal.	
Do decision-makers have access to resources— skilled personnel and user-friendly access tools— for the use and analysis of integrated datasets?	Partially Meets	The State has developed an online safety analysis tool that combines crash and roadway data. This tool is made available through an interactive portal for staff and business partners to access maps and data. Therefore, yes for integrated crash and roadway data but not for any other. The question is specific to integrated datasets; although decision makers have access to numerous datasets, these are not linked datasets.	
Does the public have access to resources— skilled personnel and user-friendly access tools— for the use and analysis of integrated datasets?	Partially Meets	The State has developed an online safety analysis tool that uses crash and roadway integration. This tool is made available through an interactive portal for staff and business partners to access maps and data. No other integrated datasets exist.	

Table 4.3   Low Priority

Assessment Question	Rating	Assessor Conclusion	Timeline
Traffic Records Coordinating Committee Management			
Does the State have both an executive and a technical TRCC?	Partially Meets	Oregon has a single working-level technical TRCC structure with oversight provided by the Oregon Transportation Safety Committee (OTSC). The technical or working-level TRCC is made up of managers and professionals representing the Traffic Records core component areas. The Transportation Safety Committee oversees all TRCC projects and functions in an oversight and advisory role, but does not quite meet the standard of serving as an executive TRCC based on the Advisory ideal. The Advisory recommends that executive group members hold positions within their agencies that enable them to establish policy and direct resources within their areas of responsibility. Based on the evidence provided, a volunteer citizen-led committee falls short of meeting the Advisory ideal for an executive-level TRCC. However, the OTSC certainly plays a positive and important role in traffic records in Oregon. Perhaps the OTSC can be expanded to include additional members with executive roles in traffic records at the State level, which would help to meet this ideal.	
Does the TRCC oversee quality control and quality improvement programs impacting core data systems?	Does Not Meet	The TRCC does not oversee quality control or quality improvement programs impacting the core data systems in Oregon. While the TRCC Strategic Plan does contain some performance measures regarding quality control for core component systems, there is no regular monitoring or formal reporting of quality performance measures to the TRCC. The TRCC should consider implementing a program which would allow committee members to receive more routine information regarding data quality. This would allow the TRCC to have some oversight and monitoring of data quality across the State's traffic records systems.	
Does the TRCC influence policy decisions that impact the State's traffic records system?	Does Not Meet	While system owners participate in the TRCC quarterly and members from all systems are represented, the examples provided don't meet the Advisory ideal. Instances where the TRCC membership issued recommendations or guidance which led to implementation of legislation impacting traffic records systems, or led to changes in a department's official "policies" regarding traffic records systems or traffic records data would help to meet the ideal.	
Does the executive TRCC meet at least once annually?	Partially Meets	The Oregon Transportation Safety Committee (OTSC) receives quarterly updates regarding TRCC proceedings and activities. However, only one agenda and no history of meeting dates have been provided so it is unclear how often the committee meets. As the OTSC only partially meets the Advisory ideal for an executive-level TRCC, it was determined that partial credit should be awarded here. If in the future, the OTSC is expanded to include membership to help it meet the Advisory ideal as an executive TRCC, then this rating would follow suit and improve accordingly.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Strategic Planning			
Does the TRCC have a process for integrating State and local data needs and goals into the TRCC strategic plan?	Partially Meets	The TRCC does not have a well-defined process for vetting stakeholder needs and integrating those needs into the strategic plan. State responses indicated that the TRCC relies on a series of public input meetings used in the development of the State's Traffic Safety Performance Plan to integrate State and local data needs. While some value for traffic records may result from this process, the TRCC would benefit from a more concerted effort to solicit and incorporate stakeholder input. Methods might include formal planning meetings to solicit specific needs or scheduled comment periods for stakeholders to influence the State's strategic direction in traffic records. Project descriptions in the strategic plan can serve to effectively document how State and local data needs are accounted for within prioritized projects.	
Does the TRCC have a process for identifying and addressing impediments to coordination with key Federal traffic records data systems?	Does Not Meet	The TRCC does not have a process in place for identifying and addressing impediments to coordination with key Federal data systems.	
Is the TRCC's strategic plan reviewed and updated annually?	Does Not Meet	While it appears the TRCC makes some updates to the traffic records strategic plan on an annual basis, these changes are not substantive and likely do not reflect the changing environment and any progress made year-to-year. For the most part, the plan itself suggests that changes are primarily for purposes of compliance with NHTSA Section 405(c) requirements. The State seems to lack a structured process for both developing and updating the strategic plan, precluding the ability to benefit from the significant results that naturally follow.	
Does the TRCC consider the use of new technology when developing and managing traffic records projects in the strategic plan?	Does Not Meet	While the strategic plan briefly mentions technology as a general consideration, no express discussion of how new technologies are leveraged in data system improvements exists within the strategic plan. The absence of project-level information in the plan is ultimately what leads to the lack of discussion concerning the use of technology.	
Does the TRCC consider lifecycle costs in implementing improvement projects?	Does Not Meet	Because the strategic plan does not currently contain project-level information, there is no indication that lifecycle costs are a prominent consideration in the vetting and prioritization process. Once Oregon builds out project-level information in the strategic plan, one of the descriptors for each candidate project should be lifecycle costs anticipated beyond initial development and implementation.	
Does the strategic plan make provisions for coordination with key federal traffic records data systems?	Does Not Meet	Nothing in the Plan document addresses how the strategic	

Assessment Question	Rating	Assessor Conclusion	Timeline
Crash			
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	TDD staff members do not currently engage in quality control analysis comparing the narrative, diagram, and coded contents of the crash report. The State's primary challenge is keeping up with the completion of the coding and reporting.	
Are independent sample-based audits periodically conducted for crash reports and related database contents?	Does Not Meet	While the State does not periodically perform independent sample-based audits, they do perform data audits as needed to monitor coder performance and data quality. However, this process was not described and no documentation was provided.	
Vehicle			
Does the State participate in the Performance and Registration Information Systems Management (PRISM) program?	Does Not Meet	Oregon currently does not participate in the Performance and Registration Information Systems Management program.	
Are there accuracy performance measures tailored to the needs of data managers and data users?	Does Not Meet	The State has no accuracy performance measures.	
Are there completeness performance measures tailored to the needs of data managers and data users?	Does Not Meet	There are no completeness performance measures for the vehicle system.	
Does the process flow diagram or narrative show alternative data flows and timelines?	Does Not Meet	A process flow diagram depicting alternative data flows was provided, but it does not show timelines. Although the State indicates that the times for the alternative business process flows (Assessment Query 94) are recorded in a separate document, no document or narrative describing the process in detail has been provided.	
Are there accessibility performance measures tailored to the needs of data managers and data users?	Does Not Meet	The vehicle system has no accessibility performance measures.	
Is data quality feedback from key users regularly communicated to data collectors and data managers?	Does Not Meet	The State response of "somewhat" to the question about data quality feedback is not sufficiently indicative of how such feedback is generated or delivered.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Driver			
Is there a formal, comprehensive data quality management program for the driver system?	Does Not Meet	The response identified the DMV's audit process but did not address a formal data quality management program.	
Has the state established numeric goals—performance metrics—for each performance measure?	Does Not Meet	Performance measures and performance metrics have not been established.	
Does the driver system capture and retain the dates of original issuance for all permits, licensing, and endorsements (e.g., learner's permit, provisional license, commercial driver's license, motorcycle license)?	Partially Meets	The Oregon driver system captures and retains the issuance dates for all permits, endorsements and licenses and maintains this information for at least nine years. The issuance segment of the data system purges information nine years after the original date of issuance. This purge process can delete references to the original issue date and actual status of previously issued permits or license endorsements.	
Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of driver education and improvement course (manual and electronic, where applicable)?	Does Not Meet	Oregon does not record the completion of driver improvement or driver education courses on the driving record. Courses mandated by courts during the adjudication phase are not recorded on the driving record because it is a court action and process.	
Are independent sample-based audits conducted periodically for the driver reports and related database contents for that record?	Does Not Meet	State auditors may do some independent periodic reviews. Individual DMV units also audit their work. Formal independent sample audits are not being done.	
Does the driver system capture novice drivers' training histories, including provider names and types of education (classroom or behind-the-wheel)?	Does Not Meet	The Oregon driver system does not collect any driver training history information. A special ad hoc report is used to determine if an individual completed driver education or motorcycle rider training. The report only identifies what portion of the licensing requirements are waived if an individual completes driver education or rider training.	
Does the driver system capture drivers' traffic violation and/or driver improvement training histories, including provider names and types of education (classroom or behind-the-wheel)?	Does Not Meet	Oregon's driver system captures and stores traffic convictions. Driver improvement training history is not captured. There is no requirement for driver improvement courses for traffic violations. Restrictions and suspensions are placed on the driving record for traffic violation convictions.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Roadway			
Is there an enterprise roadway information system containing roadway and traffic data elements for all public roads?	Partially Meets	ODOT has a transportation framework, Or Trans, which contains all data from Oregon's road authorities in one layer with one LRS. This network is interfaced with HPMS non-state roadway data. Other than the data required for HPMS, ODOT has very little traffic and roadway data for local roads, thus receiving a "partially meets the standard" rating. Oregon should consider expanding the roadway data coverage to include all local roads in the future.	
Are local agency procedures for collecting and managing the roadway data compatible with the State's enterprise roadway inventory?	Partially Meets	The State (ODOT) receives minimal data from local agencies. Local agency line-work may have some minor differences, adding complexity to the HPMS submittal. All HPMS data on local roads is collected by the State ensuring that State practices are used. Traffic count data appears to be primarily the data the State receives from local sources. Prior to accepting the data, the State works with the local agency to ensure data collection and management practices are in place. Local agencies not providing any roadway data to the State may not be using a roadway data system which is compatible with the State. The State should consider working with all these local agencies to advise them to use the same compatible standard as the State enterprise roadway inventory system in the future.	
Are there procedures for prioritizing and addressing detected errors?	Partially Meets	The State described a procedure for making corrections to errors depending on the type of error. Priority is given to serious errors (fatal error to the system or the data in error is needed ASAP) which need to be urgently corrected, important errors though not urgent, or incidental errors which are logged, corrected in the order in which they are received and corrected when they can be. Documentation for these procedures was not provided resulting in a partial rating. The State should consider creating a procedure description for reconciling detected data errors in their roadway data system.	
Is there a set of established performance measures for the uniformity of the State enterprise roadway information system?	Does Not Meet	The State does not have performance measures for the uniformity of the State enterprise roadway information system. HPMS requirements do not act as a substitute for actual performance measures. The State should be commended for the job they do and the fact they are considered to have one of the best HPMS programs in the nation. The State should consider developing an official State performance measure or measures for uniformity of all the State enterprise roadway data beyond what is required for HPMS.	
Is there a set of established performance measures for the integration of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.) and other critical data systems?	Does Not Meet	The State does not have performance measures for integration of roadway data maintained by regional and local custodians. The State should consider recommending integration performance measures similar to the State performance measures to all local and regional roadway data custodians.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Roadway			
Are the location coding methodologies for all regional and local roadway systems compatible?	Partially Meets	Location data is compatible where the regional or local agency is utilizing GIS. For State highways, ODOT uses the TransInfo database which is the parent system for the official LRS. For non-state highways, ODOT uses the HGIS15 database which is the parent system for functionally-classified roads not on the State system. ODOT has recently initiated a project to merge the HGIS15 data into TransInfo. The State should consider contacting all local agencies to ensure they are all using GIS location data systems. It is not clear that they all are; thus, a "partially meets" rating.	
Do roadway data systems maintained by regional and local custodians (e.g., MPOs, municipalities	Partially Meets	The State notes that local / regional agencies can link to the State system if they use GIS and are associated with the ODOT OrTrans framework layer. Outside of GIS, linkage has been done for special research or specific analyses, but not without manual effort. ODOT provides resources to allow the data to be linked and used together. The State should consider working with all local agencies to ensure they upgrade their roadway systems to a GIS-based roadway system compatible with the State system. Thus, the State receives a "partially meets" rating at this time.	
Is there a set of established performance measures for the timeliness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	Partially Meets	The only performance measure for timeliness of roadway data maintained by regional and local custodians is the annual HPMS submittal to FHWA. The State should consider working with all the local agencies to encourage them to meet the State timeliness requirements in a formal manner. A performance measure calculated for the update timeliness (e.g., the median or mean number of days from (a) roadway project completion to (b) the date the updated critical data elements are entered into the roadway inventory file) might work for local agencies.	
Is there a set of established performance measures for the accuracy of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	Does Not Meet	The State does not have performance measures for the accuracy of the roadway data maintained by regional and local custodians. If and when the State defines and creates a State performance measure for accuracy of the State roadway data, then the State should consider recommending that same performance measure to the local and regional roadway data custodians.	
Is there a set of established performance measures for the completeness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?	Does Not Meet	Oregon does not have an official performance measure for the completeness of the roadway data maintained by local agencies. The State does query local road agencies annually and uses quality assurance steps to monitor them. Crash coders sometimes find that a crash has occurred on an unknown road. In addition, public vehicular areas are hard to deal with because they are not State-controlled roadways (private sub-divisions, mall parking lots, etc.). These issues would have to be resolved. If the State defines and creates a State performance measure for State roadway data completeness, the State should consider recommending a similar performance measure to the local and regional roadway data custodians.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Is there a statewide authority that assigns unique citation numbers?	Does Not Meet	There is no statewide system that generates unique citation numbers. The State court case management assigns unique court case numbers upon filing, but that system does not assign numbers for the local courts. Each law enforcement agency assigns its own citation numbers.	
Are the courts' case management systems interoperable among all jurisdictions within the State (including local, municipal and State)?	Does Not Meet	Although the State has described a system where information is accessible to authorized individuals, not all court management systems are inter-operable among the Circuit, municipal and justice courts.	
Is citation and adjudication data used for traffic safety analysis to identify problem locations, areas, problem drivers, and issues related to the issuance of citations, prosecution of offenders, and adjudication of cases by courts?	Does Not Meet	The State has described how citation and adjudication data is used in the prosecution and adjudication of cases; however, it has not indicated if the data referred to is used for other aspects of traffic safety analysis as referred to in the question. No example analysis and description of the policy or enforcement actions taken as a result are provided.	
Does the citation system have a data dictionary?	Does Not Meet	The State has provided conflicting information in response to the data dictionary question and has not provided the dictionary for review.	
Do the citation data dictionaries clearly define all data fields?	Does Not Meet	The State response of yes to this question is in conflict with the answer provided in the previous question. As there was no evidence provided, it is impossible to determine whether the State meets or partially meets the Advisory ideal.	
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 State reports that the data dictionaries are frequently updated. However, the requested narrative describing the process—including timelines and the summary of changes—used to ensure uniformity in the field data collection manuals, training materials, coding manuals, and corresponding reports has not been provided.	
Do the citation data dictionaries indicate the data fields that are populated through interface linkages with other traffic records system components?	Does Not Meet	A list of data fields populated through interface linkages with other traffic records system components is not provided. The State indicates that the citation data dictionaries do not indicate the interfaced fields.	
Do the courts' case management system data dictionaries provide a definition for each data field?	Does Not Meet	A list and data dictionary for one State, one county/district, and one local (municipal) court if they do not use the same case management systems has not been provided as requested.	
Does the State have a system for tracking administrative driver penalties and sanctions?	Does Not Meet	The State has indicated that there is a system for tracking administrative driver penalties and sanctions; however, no evidence (narrative description) was provided.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Does the State have a system for tracking traffic citations for juvenile offenders?	Partially Meets	The State has described a system in Circuit Courts for tracking traffic citations for juvenile offenders, and has provided statutory authority for situations where a juvenile case can be "waived into adult court." The State is unable to provide information for juvenile cases from local courts outside the State-funded court system. There is no information about how traffic citations for juvenile offenders are processed in justice and municipal courts. Municipal and justice courts are "local" courts outside the State-funded court system.	
Is citation data linked with the driver system to collect driver information, to carry out administrative actions (e.g., suspension, revocation, cancellation, interlock) and determine the applicable charges?	Partially Meets	The State has indicated that the citation data is linked with the driver system to determine applicable charges, namely whether the driver is eligible for a fine reduction or increase in penalty. The State has further stated that the courts do not determine applicable charges but has not indicated if the appropriate authority utilizes linked data to do so. The citation data that is passed is utilized by the DMV for administrative sanctions. The State has not elaborated on the use of citation data for the named functions in the municipal and justice courts.	
Is adjudication data linked with the driver system to collect certified driver records and administrative actions (e.g., suspension, revocation, cancellation, interlock) to determine the applicable charges and to post the dispositions to the driver file?	Does Not Meet	The adjudication data from State courts is not linked with the driver system to post dispositions to the driver file.	
In States that have an agency responsible for issuing unique citation numbers, is information on intermediate dispositions (e.g., deferrals, dismissals) captured?	Does Not Meet	The State does not have a single agency responsible for issuing a unique citation number.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?	Partially Meets	Any and all citations issued by law enforcement in Oregon by law must be filed with a court by law enforcement. No pre-court filing administrative process to dispose of citations is approved. All citations filed in circuit courts are entered into the Judicial Department's case management system. Court staff members complete the record by entering the disposition of the case. The record will include whether the charges were dismissed or whether the defendant was convicted. In cases where a defendant is convicted of a traffic offense, the court submits an abstract of judgment to ODOT's Driver and Motor Vehicle Services Division (DMV). DMV adds the conviction information to the person's driver history. No information is provided about how cases are processed in justice and municipal courts. Municipal and justice courts are "local" courts outside the State-funded court system with jurisdiction limited to violations, lesser crimes, and some other less serious cases. Oregon Revised Statutes (ORS) 153.800 allows any court in Oregon including municipal and justice courts to establish a Violations Bureau. ORS 810.370 mandates all courts (including municipal and justice courts) to forward all convictions related to the operation of motor vehicles on streets and highways to the Department of Transportation within 24 hours of the time the defendant was sentenced by the court. The information provided does not indicate whether the State has any requirements for dismissals or other dispositions to be sent to the Department of Transportation. The answer is incomplete because it does not explain if the dismissals and deferrals are included in the definition of the required "convictions" and, therefore, reported.	
Are final dispositions (up to and including the resolution of any appeals) posted to the driver data system?	Partially Meets	Oregon statute requires courts (includes circuit, justice, and municipal courts) to notify the Department of Transportation's Driver and Motor Vehicle Services Division (DMV) within 24 hours of sentencing a defendant for a traffic offense. No requirement is stated about the reporting of dismissals, not guilty findings or any type of deferral action. Circuit Courts submit an abstract of judgment to DMV, and DMV posts information about the conviction to the defendant's driving record. Courts do not notify DMV if the violation is appealed. A flow chart for the different courts would complete the answer.	
Do the appropriate portions of the citation and adjudication systems adhere to the National Incident-Based Reporting System (NIBRS) guidelines?	Partially Meets	The State is adherent as to crime reporting of citation data--some at the UCR level and others at the NIBRS level. Still others report at O-NIBRS level, a superset of data. Without the requested narrative statement detailing the systems and their adherence to the NIBRS guidelines, status is unclear as to all State and local agencies.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Information Network (LEIN) guidelines?	Does Not Meet	No information or documentation of how the records might adhere to the National Law Enforcement Information Network (LEIN) guidelines is provided.	
Do the appropriate portions of the citation and adjudication systems adhere to the Functional Requirement Standards for Traffic Court Case Management?	Partially Meets	The new Oregon eCourt system includes all of the functions identified in NCSC's Functional Requirement Standards for Traffic Court Case Management Systems. Currently, 26 out of the 36 Circuit Courts are on the new system. All Circuit Courts will convert to Oregon eCourt by June 2016. However, no information is provided about the local court records and whether the local courts will be on the eCourt system.	
Do the appropriate portions of the citation and adjudication systems adhere to the NIEM Justice domain guidelines?	Does Not Meet	The State has indicated that data sent from the Judicial Department to the State Police is not NIEM compliant; however, code is currently being updated contemplating the NIEM standards. The State did not provide a narrative statement detailing the other systems (local courts) and their adherence to the NIEM Justice domain guidelines.	
Does the State use the National Center for State Courts guidelines for court records?	Partially Meets	The Circuit Courts have deployed or will deploy the eCourt system which meets the guidelines by June 2016. There is no narrative explanation about the local court record-keeping and their adherence to NCSC guidelines for court records or if a comparable guideline is being used.	
Does the State use the Global Justice Reference Architecture (GRA)?	Does Not Meet	The State does not use the Global Justice Reference Architecture (GRA).	
Does the State have an impaired driving data tracking system that meets the specifications of NHTSA's Model Impaired Driving Records Information System (MIDRIS)?	Does Not Meet	The Oregon eCourt system does have several MIDRIS components. Law enforcement agencies from around the State, including some of the largest agencies (Oregon State Police and Portland Police Bureau) electronically file citations with circuit courts. The citing agency transmits the citation information (including an image of the citation) to circuit courts on a daily basis. Additionally, district attorney offices, law enforcement agencies, and members of the State Bar are able to access case information (i.e., view case docketing information and documents filed in the case) online. It is not clear whether the local courts handle traffic cases and how the records are integrated into the State record system. In summary: The State does not have a single statewide impaired driving data tracking system that meets the specifications of NHTSA's Model Impaired Driving Records Information System (MIDRIS).	
Do the courts' case management system data dictionaries clearly define all data fields?	Partially Meets	A sample of the data dictionary used by the Department's case management system is provided. No information is given as to what the local (justice and municipal) courts use to process their cases.	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
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	The Judicial Department's Enterprise Technology and Services Division in the Office of the State Court Administrator indicates two data dictionary integrations – one with the State Police and one with the City of Portland which supplies traffic citation data to Odyssey (the Department's case management system) to create traffic violation cases only. However, the courts' case management system data dictionaries do not indicate the data fields populated through interface linkages with other traffic records system components.	
Do the prosecutors' information systems have data dictionaries?	Does Not Meet	The State reports a dictionary of sorts from Law Enforcement Data System, and provided a sample from the Oregon Judicial Information system. No information about the types or number of prosecutor data systems are in use and no data dictionary was provided.	
Does the State measure compliance with the process outlined in the citation lifecycle flow chart?	Partially Meets	The narrative describes how the State measures compliance with the citation lifecycle process specified in the flow chart in the Circuit Courts and some law enforcement agencies. This is not statewide nor are all courts included. Although the State has acknowledged that there is no single agency that measures compliance for all stages of the lifecycle of a citation, the State has described a system whereby responsible agencies are connected (either electronically or through manual process) and provide checks against one another to ensure compliance with the citation process.	
Does the State distinguish between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances?	Partially Meets	The Circuit Courts appear to meet the ideal. A written business process, which documents that the Department's system tracks how the case was resolved, is provided. No information is provided as to the local courts. A fair rating for the State cannot be provided without information about the local courts.	
Are the security protocols governing data access, modification, and release officially documented?	Partially Meets	The answer is quite extensive as to the Circuit Court official security protocols governing data access, modification, and release. The protocols are being updated and it is likely that they will meet the Advisory ideal. The information provided for the local courts or other agencies is that they are governed by Oregon public records law. The information as to the local courts is incomplete.	
Is citation data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?	Does Not Meet	Citation data is not linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock).	

Assessment Question	Rating	Assessor Conclusion	Timeline
Citation/Adjudication			
Is adjudication data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock mandates and supervision)?	Does Not Meet	Adjudication data is not linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock mandates and supervision).	
Is citation data linked with the crash file to document violations and charges related to the crash?	Does Not Meet	The State has indicated that citation data is linked with the crash file to document violations and charges related to the crash; however, the State did not provide the requested evidence.	
Is adjudication data linked with the crash file to document violations and charges related to the crash?	Does Not Meet	No results of a sample query and/or description of how the adjudication or linked information is used to document violations and charges related to the crash is provided. The State has indicated that the adjudication data is not linked with the crash file to document violations and charges related to the crash.	
Do the appropriate components of the citation and adjudication systems adhere to the National Crime Information Center (NCIC) data guidelines?	Partially Meets	The State has indicated adherence to NCIC data guidelines but has not provided the required narrative statement detailing the systems and their adherence to the NCIC guidelines.	
EMS/Injury Surveillance			
Does the injury surveillance system include EMS data?	Partially Meets	EMS data is available on a large subset of EMS transports in the State and the information collected is submitted to the NEMSIS Technical Assistance Center. However, that data only applies to patients treated at a trauma center, not all motor vehicle crash victims receiving EMS treatment. From this data, there were approximately 6,800 responses related to motor vehicle crashes in 2014.	
Does the injury surveillance system include emergency department (ED) data?	Partially Meets	Emergency department data is available, but only for patients that presented at a trauma level hospital and not all motor vehicle crash victims treated in any emergency department.	
Is the hospital discharge data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Partially Meets	Hospital discharge data is available for analysis both internally and to external parties. A process has been implemented to obtain access for use by outside parties; however, no examples of its use for highway safety projects were available.	
Is the trauma registry data available for analysis and used to identify problems, evaluate programs, and allocate resources?	Partially Meets	The trauma registry data can be used for analysis and problem identification. An analysis of pedestrian injuries was provided and the trauma registry was listed as a potential data source; however, how it was used in the development of the program was unclear.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Does the hospital discharge dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?	Does Not Meet	Only a data dictionary is available, the Oregon Health Authority does not maintain documentation with additional characteristics of the hospital discharge data system.	
Does the vital records system have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?	Partially Meets	The vital records data layout includes information about elements and attributes, but is more of a data dictionary than summary documentation which would also include data collection and management information.	
Is there a process flow diagram that outlines the hospital discharge data's key data process flows, including inputs from other systems?	Does Not Meet	No process flow diagram is available for the collection and use of the State's hospital discharge data.	
Is there a process flow diagram that outlines the trauma registry's key data process flows, including inputs from other systems?	Does Not Meet	Process flow diagrams may be included in the documentation on the State's Trauma Registry website, but it was not available.	
Does the trauma registry have documented procedures for collecting, editing, error checking, and submitting data?	Does Not Meet	Documentation for supervisory responsibilities (controlling user access, system contents, etc.) is available, but information related to the collection, submission, and error-checking of the trauma data was not available. Training videos are available on YouTube but not provided in this Assessment.	
Are there documented procedures for returning data to the reporting emergency departments for quality assurance and improvement (e.g., correction and resubmission)?	Partially Meets	There are no documented quality control procedures for returning data to the reporting agency outside of timeliness (late submissions trigger an automated message). However, ad-hoc quality control queries are conducted by the State epidemiologist and emergency departments are contacted when decreased visit counts or other data aberrations occur.	
Are there documented procedures for returning data to the reporting vital records agency for quality assurance and improvement (e.g., correction and resubmission)?	Partially Meets	There is a daily edit report generated by NCHS to allow for correction of errors. The Oregon Vital Records agency edits the records and resubmits them to NCHS. It is unclear if the original submitting agency is involved or provides the correct information to the State during this process.	
Are there formally documented processes for returning rejected EMS patient care reports to the collecting entity and tracking resubmission to the statewide EMS database?	Partially Meets	There is no documented process; returning patient care reports for correction is done on an informal basis. The ImageTrend software provides a process for tracking of reports through the system and quality control processes are included in the training modules.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Is there performance reporting for the EMS system that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	Partially Meets	Data quality feedback is provided on a State-level and EMS providers receive a validation report when data is submitted to the State. Timeliness and completeness are addressed in these reports, but not accuracy.	
Are there timeliness performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no timeliness performance measures for the trauma registry. Performance measures are established to help a State or agency track progress in their data systems.	
Are there accuracy performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no accuracy performance measures for the trauma registry. Performance measures are established to help a State or agency track progress in their data systems. The Oregon Trauma Registry Performance Report includes comparative trends over time, but it is not clear how that information is used to evaluate system accuracy.	
Are there completeness performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no completeness performance measures for the trauma registry. Performance measures are established to help a State or agency track progress in their data systems.	
Are there uniformity performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no uniformity performance measures for the trauma registry. Performance measures are established to help a State or agency track progress in their data systems.	
Are there integration performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no integration performance measures for the trauma registry. Performance measures are established to help a State or agency track progress in their data systems.	
Are there accessibility performance measures tailored to the needs of trauma registry managers and data users?	Does Not Meet	There are no accessibility performance measures for the trauma registry. Accessibility performance measures track the ability of principal users to obtain the data or other services and their satisfaction. The State collects such feedback during trauma center visits, but it is not clear how that information is used to evaluate the system.	
Is there performance reporting for the trauma registry that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	Partially Meets	It was reported that quarterly performance reports are provided to each hospital, but the only available information about the content of those reports related to timeliness of data submission from trauma discharge; accuracy and completeness feedback was not included.	
Are high frequency errors used to update trauma registry training content, data collection manuals, and validation rules?	Partially Meets	Data errors are reportedly used to update training and documentation. Based on user feedback, Cheat Sheets are developed and disseminated to key users as a form of training. The State's process for incorporating feedback into training and edit check revisions is unclear beyond the Cheat Sheets.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Are there timeliness performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Oregon Law requires submission of the record to the State within 5 days of the death and the contract with NCHS requires 85% of the records to be sent within 10 days of the registration date. However, these are not performance measures, which include baseline and goal metrics and are used to evaluate progress.	
Are there accuracy performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Although the State follows all NCHS requirements, there are no accuracy performance measures for the vital records system. Performance measures include a goal against which a system may be evaluated regularly to determine success or need for improvement.	
Are there completeness performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Although the State follows all NCHS requirements, there are no completeness performance measures for the vital records system. Performance measures include a goal against which a system may be evaluated regularly to determine success or need for improvement.	
Are there uniformity performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Although the State follows all NCHS requirements, there are no uniformity performance measures for the vital records system. Performance measures include a goal against which a system may be evaluated regularly to determine success or need for improvement.	
Are there integration performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Although the State follows all NCHS requirements, there are no integration performance measures for the vital records system. Performance measures include a goal against which a system may be evaluated regularly to determine success or need for improvement. It is unclear if vital records data is integrated with any other traffic records system components.	
Are there accessibility performance measures tailored to the needs of vital records managers and data users?	Does Not Meet	Although the State follows all NCHS requirements, there are no accessibility performance measures for the vital records system. Performance measures include a goal against which a system may be evaluated regularly to determine success or need for improvement.	
Is there performance reporting for vital records that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?	Partially Meets	A quality review report that includes timeliness, accuracy, and completeness measures is provided to all funeral homes. It is unclear if other submitting entities also receive performance reports.	
Is limited state-level correction authority granted to quality control staff working with the statewide EMS database in order to amend obvious errors and omissions without returning the report to the originating entity?	Does Not Meet	Submission of EMS data is strictly voluntary, but agencies typically make corrections when errors are detected by the system or other analysts. Subsequently, there is no State-level correction authority.	

Assessment Question	Rating	Assessor Conclusion	Timeline
EMS/Injury Surveillance			
Is limited state-level correction authority granted to quality control staff working with the statewide emergency department and hospital discharge databases in order to amend obvious errors and omissions without returning the report to the originating entity?	Does Not Meet	The hospital datasets (ED and inpatient) are managed by the Oregon Hospital Association and the State is not involved in the submission and data correction processes. Although the State notes erroneous information and passes that information along to analysts, there seems to be no State-level correction authority.	
Has the State established numeric goals—performance metrics—for each emergency department and hospital discharge database performance measure?	Does Not Meet	There are no performance metrics because there are no performance measures. With the implementation of the ESSENCE program, there is an opportunity to establish several numeric performance goals for the hospital databases.	
Is limited state-level correction authority granted to quality control staff working with the statewide trauma registry in order to amend obvious errors and omissions without returning the report to the originating entity?	Does Not Meet	Correction authority is reportedly given to the State staff maintaining the trauma registry, but no information was provided with regards to the procedures that are in place to allow this activity.	
Has the State established numeric goals—performance metrics—for each trauma registry performance measure?	Does Not Meet	There are no numeric goals because there are no established performance measures. Even though timely reporting and complete records were reported as performance measures, the associated numeric goals were not provided.	
Is limited state-level correction authority granted to quality control staff working with vital records in order to amend obvious errors and omissions without returning the report to the originating entity?	Does Not Meet	It was stated that Oregon vital records is the originating agency of the vital records and all changes to records are completed following law and administrative rules and are completed and approved by the Oregon vital records. It is unclear, but seems that there is no correction authority granted to State quality control staff and corrections are made to a vital record by the submitting agency which is also a State entity.	
Are periodic comparative and trend analyses used to identify unexplained differences in the vital records data across years and agencies?	Partially Meets	Periodic trend analyses are conducted by NCHS that identify 'unknown' levels in order to revise tolerance levels. The State conducts quarterly and annual edits of 'unknown' levels as well, but it is unclear if other values are also evaluated or if differences are identified across agencies.	
Data Use and Integration			
Does the State have a data governance process?	Does Not Meet	The State does not have a governance process specifically for traffic records. The State's DOT has several data governance structures in place but little was mentioned of the other traffic safety systems, nor is there an overall structure.	
Is data from traffic records component systems—excluding crash—integrated for specific analytical purposes?	Does Not Meet	While the State has a robust roadway records system that consists of multiple layers that can be linked, this does not constitute linkage of two or more of the component traffic safety systems.	

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 2020 Oregon submitted the following metric:

A performance measure to improve the Vehicle file was established to "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 *(currently 0%).*" This measure is found in the table on page 7-5.

In the period beginning April 1, 2017, and ending March 31, 2018 there were 0% of the active titles and brands updated to the National Motor Vehicle Title Information System (NMVTIS) Vehicle Identification Number (VIN) pointer and brand files. During the period beginning April 1 2018 and ending March 31, 2018 100% of the active titles and brands were subsequently updated to the System through an automated and now ongoing process, thus improving accessibility of the core vehicle database.

6.0   Approved FFY 2020 TRCC Projects

Traffic Count Management Improvement Project

ODOT's Transportation System Monitoring (TSM) Unit will improve timeliness and accuracy of the Traffic Count Management (TCM) program by purchasing and deploying software to gather and retain data needed to inform safety related decisions about programs, major projects and planning efforts for state and local government. Major project expenses include software and the establishment of both an IS Project Manager and a Project Analyst. The positions will provide project leadership to develop project scope and requirements, documentation, budget management, project reporting, and communication facilitation. $765,389 in 405c funds will be used to award this project over the next three Federal Fiscal Years (2018-2020). This project extends the completion deadline for the project from the prior year. It is expected that this project will improve performance measures RA1, RU1, RC1, RC3, and RX1, as shown section 7.

Multi Agency Computer Aided Dispatching (CAD)

This project will provide an improved computer aided dispatching system for OSP as well as other agencies within Oregon. It is anticipated this system will improve data accuracy of multiple data files including Crash, Driver, Citation, and possibly others depending on system design options. It is expected that performance measures CT1, CT2, CC2, and CI1, as shown in section 7, will be improved. Up to $515,000 is set aside for software, consultation and staff.

EMS/NEMSIS Local Data Entry Device/Training

This project is to purchase data entry devices to allow more timely and accurate input of patient events into the NEMSIS 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 performance measures IT1, IA1, and IC1, as shown in section 7, will be improved. Up to $40,000 is set aside for investments in input devices and training.

Software Improvement – EMS/NEMSIS Data Entry Systems

This project will allow a system software improvement to allow local EMS technicians to re-open a file in the Oregon NEMSIS reporting system for purposes of updating and/or correcting data in the system. It is expected that performance measures IT1, IA1, and IC1, as shown in the tables listed in Section 7, will be improved. Up to $50,000 is reserved to fund consultant software upgrades.

NEMSIS Use Capacity Building Pilot

This project will allow a pilot project to increase access to and use of NEMSIS data 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, as shown in Section 7, and the ability to increase the percent of data retrieval and analysis will be improved. This work is budgeted at $70,000 to fund research consultant or staff work.

Vehicle Operator Education Module(s) – Driver File

This project will develop modules to allow driver education providers and testers to directly input course completion electronically, and for DMV technicians to instantly know when students have completed driver education courses. It is expected there will be multiple benefits including improvements to performance measures DA1 and DC2, as shown in Section 7. The current process is dis-jointed and cumbersome. An initial $10,000 is assigned to this project for consultant work to determine cost and scope of the project.

E-Citation Implementation

This project allows for expansion of use of electronic citation and crash reporting from the purchase of software and equipment for law enforcement agencies statewide. The project will purchase system components (equipment and software, and may include some consultant time for integration) needed to continue efforts to move Oregon law enforcement agencies toward more accurate, complete, and timely digital submission of information to the courts and DMV for processing.

This project addresses multiple improvement points within multiple systems, by allowing agencies to move forward with key system improvements identified in the current strategic plan, and with the most recent NHTSA assessment. In the affected agencies, this project will improve the procedures/ process flows for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory, including an improvement to the interfaces with the Crash data system to also reflect best practices; 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 to reflect best practices identified in the Traffic Records Program Assessment Advisory. It is expected that performance measures CA1, CT1, CT2, and CC2, as shown in the tables listed section 7, will be improved. Total requests were $300,000 for consultant, software and supplies (handheld data entry devices).

Clackamas County – 'Vision Zero' Software Pilot Project

This project will begin pilot testing 'Vision Zero' software designed to assess available data and offer solutions to various traffic safety challenges. The project is expected to improve performance measures CX1, and RX1 as shown in section 7. Up to $85,000 in funding is planned for this initial pilot.

7.0 Traffic Records Deficiencies and Performance Measures

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).
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	Outreach is needed to build support for law enforcement crash reporting.
Deficiency	Completeness	A public report of percentage of crashes, by jurisdiction, reported by each law enforcement agency does not exist.

	Data Quality	**Reportable Crash Data**
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.
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).

	Data Quality	Reportable Crash Data
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.
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 o 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.

	Data Quality	**Vehicle Data**
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).
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 *(currently 0%)*.
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.
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. *(Currently, not measurable.)*
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.
Deficiency	Uniformity	Increase the number of standards-compliant data elements entered into the driver database or obtained via linkage to other databases.

	Data Quality	**Driver Data**
Performance Measure	Uniformity	Increase the percentage of Social Security Numbers (SSNs) and immigration documents verified. *(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.)*
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.
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.

	Data Quality	**Citation/Adjudication Data**
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	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.
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.

	Data Quality	Citation/Adjudication Data
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
Deficiency	Timeliness	EMS run reporting software for prehospital data is out of date and most EMS providers are using paper submittal.
Performance Measure	Timeliness	Increase the percentage of EMS run reports sent to the state within 60 days.
Performance Measure	Timeliness	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.
Performance Measure	Timeliness	I-T-2: The percentage of EMS patient care reports entered into the State EMS discharge file within XX days after the EMS run (e.g., 5, 30, or 90 days).
Deficiency	Accuracy	Increase the percentage of EMS patient care reports with no errors in critical data elements (example: Response Time).
Performance Measure	Accuracy	I-A-1: The percentage of EMS patient care reports with no errors in critical data elements (example: Response Time).
Deficiency	Completeness	Data collected since the initial pilot project in May 2008 requires data entry to the statewide EMS database.
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	Data linkage between crash and hospital data for ad-hoc analysis is limited.
Deficiency	Completeness	Encourage GPS and/or map-based location coding for EMS run report data collection.
Deficiency	Completeness	The trauma registry includes prehospital treatment information, but does not include the EMS run report number. There is a backlog of prehospital data that requires manual data entry to catch up. The state estimates that approximately 95% of the motor vehicle crash-related trauma cases are entered into the trauma registry.
Performance Measure	Completeness	Increase the number of EMS Patient Care Reports collected and entered into the statewide EMS database.
Performance Measure	Completeness	I-C-1: The percentage of EMS patient care reports with no missing critical data elements.
Performance Measure	Completeness	I-C-2: The percentage of EMS patient care reports with no missing data elements.
Performance Measure	Completeness	I-C-3: The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.
Deficiency	Uniformity	Continue the statewide EMS data collection system.

	Data Quality	**Injury Surveillance Data**
Deficiency	Uniformity	Oregon is currently working on a pilot project to establish an EMS run report database for rural ambulance service data tracking. This prehospital data system will conform to National EMS Information System (NEMSIS) guidelines. The current TraumaOne database (Oregon Trauma Registry) complies with the National Trauma Data Standard (NTDS). There are a number of data elements in the NTDS that are exactly the same as in the NEMSIS standard; however, NTDS does not include a standard XML format to facilitate data exchange.
Performance Measure	Uniformity	Increase the number of NEMSIS collected data elements present in the Oregon Pre-Hospital Database.
Performance Measure	Uniformity	I-U-1: The percentage of records on the State EMS data file 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.
Deficiency	Integration	Production of the biennial trauma registry report. A unique identifier system that follows patients across multiple incidents, is shared among medical data applications, and that can be used for linkage with crash and other data does not exist.
Deficiency	Integration	Lack of personal identifiers in medical datasets, even for internal departmental use, makes it difficult to identify patients who are in the system more than once and to link with crash or other data.
Performance Measure	Integration	Increase the number of records within the trauma registry that contain or are linked to the EMS run report number.
Performance Measure	Integration	Increase the percentage of traffic-related EMS injury runs that can be precisely linked to crash reports.
Performance Measure	Integration	I-I-1: The percentage of appropriate records in the EMS file that are linked to another system or file (example: EMS response linked to Trauma file).
Deficiency	Accessibility	There are currently only a few agencies reporting run reports electronically to the statewide trauma registry.
Performance Measure	Accessibility	Increase the percent of EMS agencies using on-line system for submitting run reports electronically to the statewide trauma registry, as well as data retrieval and statistical analysis.
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.