

UTAH TRAFFIC RECORDS INFORMATION SYSTEMS STRATEGIC PLAN

Utah Traffic Records Advisory Committee (UTRAC)



May 31, 2016
STATE OF UTAH

TABLE OF CONTENTS

Table of Contents	1
Strategic Plan Endorsement	1
Introduction.....	2
Planning Process.....	2
Strategic Plan Revision and Accountability	2
Utah Traffic Records Advisory Committee (UTRAC) Overview.....	2
Role of UTRAC.....	3
UTRAC Roster.....	4
Strategic Plan Elements	5
Goals.....	5
Performance Measures – Timeliness.....	6
Performance Measures – Accuracy.....	7
Performance Measures – Completeness.....	8
Performance Measures – Uniformity.....	9
Performance Measures – Integration.....	10
Performance Measures – Accessibility.....	12
Demonstrated Measurable Progress	13
Recommendations from Traffic Records System Assessment	15

UTAH TRAFFIC RECORDS ADVISORY COMMITTEE (UTRAC) STRATEGIC PLAN ENDORSEMENT

Representatives of the Utah Traffic Records Advisory Committee have reviewed the Utah Traffic Information Systems Strategic Plan and endorse the plan.



Gary Mower, State Traffic Records Coordinator
 Traffic Records Program Manager
 Utah Department of Public Safety, Highway Safety Office



Date

INTRODUCTION

The Utah Traffic Records Information Systems Strategic Plan serves as a guiding document for Utah's Traffic Records Advisory Committee (UTRAC). The purpose of this document is to provide a guide for Utah's traffic records information community to work towards increasing timeliness, accuracy, completeness, accessibility and uniformity of Utah's traffic records systems. This document offers a foundation to member and their organizations to continue working as one cohesive committee in efforts to improve and update data systems. Within this document are goals and objectives set forth as a committee to be used as a measurement tool of system improvement over the next five years.

PLANNING PROCESS

Goals and performance measures contained in this document are based upon the recommendations and findings from the most recent assessment conducted on the Utah traffic records information system. Assessment recommendations from other related traffic safety studies have also played a role in determining the some of the goals and objectives in specific areas of the strategic plan. The most recent traffic records assessment conducted in Utah occurred in May, 2014. This assessment was conducted by the National Highway Traffic Safety Administration (NHTSA). In June, 2011, the Federal Highway Administration (FHWA) facilitated a Crash Data Improvement Program (CDIP) Assessment. The recommendations and findings from these assessments drive the direction of the strategic planning process.

With the assessments as guides, a framework was developed for Utah's Traffic Records Information System Strategic Plan. Additionally, the Utah Traffic Records Advisory Committee (UTRAC) members, provided direction and feedback on the focus of the goals and objectives using their diverse expertise and experience in each of the traffic safety related areas.

STRATEGIC PLAN REVISION AND ACCOUNTABILITY

This document is intended to be a living document. As with prior strategic plans, this plan will be reviewed by the UTRAC on an annual basis. Reviewing the plan annually provides an opportunity for committee members to revise project plans to better meet changes in organizational priorities, as well as, any changes at the state or federal level.

The performance measures given in the goals and objectives section will be reviewed for progress at least annually. By doing so, the committee can ensure that data improvement projects are moving forward in a timely manner as prescribed by the State. Additionally, such improvement will ensure that demonstrated measurable progress will be met for the annual MAP21 405(c) certification.

UTAH TRAFFIC RECORDS ADVISORY COMMITTEE OVERVIEW

The Utah Traffic Records Advisory Committee (UTRAC) is a multidisciplinary, interagency committee that has agreed to collaborate in the implementation of the Utah Traffic Safety Information Systems Strategic Plan. The mission of UTRAC is to provide more timely, accurate, complete, uniform, integrated and accessible data to the traffic safety community.

The Utah Traffic Records Advisory Committee (UTRAC) is operational and functioning, and members of UTRAC represent the interests of the following:

- Highway safety;
- Highway infrastructure;
- Law enforcement and adjudication;
- Public health and injury control;
- Motor carrier agencies and organizations.
- Local organizations

ROLE OF UTAH TRAFFIC RECORDS ADVISORY COMMITTEE

The role and function of the Utah Traffic Records Advisory Committee (UTRAC) is outlined as follows:

- Review and approve the Utah Traffic Safety Information Systems Strategic Plan;
- Review Utah's highway safety data and traffic records systems;
- Review changes to Utah's highway safety data and traffic records systems before the changes are implemented;
- Provide a forum for the discussion of highway safety data and traffic records issues;
- Report any highway safety data and traffic records issues to the agencies and organizations in Utah that create, maintain and use highway safety data and traffic records;
- Consider and coordinate the views of organizations in Utah that are involved in the administration, collection and use of the highway safety data and traffic records system;
- Represent the interests of the agencies and organizations within the traffic records system to outside organizations; and
- Review and evaluate new technologies to keep the highway safety data and traffic records systems up-to-date.

UTAH TRAFFIC RECORDS ADVISORY COMMITTEE ROSTER

Name	Agency	Function
Alice Moffat	Utah Department of Public Safety	All
Angie Turner	Ogden City Police Department	All
Bert Granberg	Utah Department of Technology Services	Crash
Brendan Duffy	University of Utah College of Engineering	All
Chad Sheppick	Utah Department of Transportation, Motor Carrier Division	Crash, Vehicle
Christopher Caras	Utah Department of Public Safety	All
Daniel Fuhr	Utah Department of Public Safety	All
David Blauer	Federal Motor Carrier Administration	Crash, Vehicle
Eric Parry	Utah Communications Authority	All
Felicia Alvarez	Utah Department of Health	Crash, Person
Gary Mower	Utah Department of Public Safety	All
John Fairbanks Jr.	Utah Department of Public Safety	All
Juan Medina	University of Utah College of Engineering	All
Larry Cook Ph.D.	University of Utah School of Medicine	All
Lisa Crenshaw	Administrator Offices of the Courts	Citation
Matt Slawson	Utah Department of Health	Crash, Person
Mike Cook	Utah Department of Public Safety	All
Mike Sadler	Utah Department of Technology Services	All
Paul Barron	Administrator Offices of the Courts	Citation
Paul Patrick	Utah Department of Health	Crash, Person
Rick Martin	Administrator Offices of the Courts	Citation
Robert Miles	Utah Department of Transportation	All
Roland Stanger	Federal Highway Administration	Crash
Steve Coons	Utah Tax Commission	Vehicle
W. Scott Jones	Utah Department of Transportation	All
	Federal Motor Carrier Administration	Crash, Vehicle

UTAH TRAFFIC RECORDS INFORMATION STRATEGIC PLAN ELEMENTS

STRATEGIC GOALS

- **Timeliness:** Reduce or maintain the span of time between the occurrence of an event and entry into the appropriate traffic records database.
- **Accuracy:** Increase the amount of traffic records data that is error-free, satisfies internal consistency checks, and does not exist in duplicate within a single database.
- **Completeness:** Decrease both the number of records that are missing from the traffic records databases and the number of missing data elements in the records that are in the databases.
- **Uniformity:** Update and maintain the consistency among the files or records in the traffic records systems and how they measure against independent or national standards.
- **Integration:** Increase the ability of records in a database to be linked to a set of records or components thereof in another traffic records database.
- **Accessibility:** Facilitate the ability of legitimate users to successfully obtain desired data in traffic records systems.

PERFORMANCE MEASURES

Timeliness: Reduce or maintain the span of time between the occurrence of an event and entry into the appropriate traffic records database.

T1: Decrease the average number of days from the day of the crash event to initial submission to the crash repository.					
YEAR	2013	2014	2015	2016	2017
# days	49.97	8.76	8.04		
T2: Increase the percentage of crash reports submitted into the database within 30 days after the crash.					
YEAR	2013	2014	2015	2016	2017
% submitted	74.61%	95.66%	96.46%		
T3: Decrease the median number of days from fatal crash event to initial FARS Entry.					
YEAR	2014	2015	2016	2017	2018
# days	39				
T4: Decrease the median days from a commercial vehicle crash event to crash submission to FMCSA MCMIS file from 53 to 30.					
YEAR	2014	2015	2016	2017	2018
# days	53	15			
T5: Decrease the median days from the crash event to crash geo-located on crash file from 218 to 21.					
YEAR	2014	2015	2016	2017	2018
# days	90	29			
T6: Decrease the percentage of citations filed with CORIS greater than 5 days past the date of the violation event.					
YEAR	July 2012	July 2013	July 2014	July 2015	July 2016
% citations	10.4%	12.6%	9.6%	9.5%	

T7: Decrease the number of median days from date of event to date accessible in trauma registry.					
YEAR	2014	2015	2016	2017	2018
# days	142	132			
T8: Decrease the mean number of days from date of sample arrival time at the Utah Public Health Laboratory until a report is issued to law enforcement to 14 days.					
YEAR	2014	2015	2016	2017	2018
# days	14 days (6,174 cases)	24 days (6,388 cases)			
		Without primary screening instrument, chief scientist, and toxicologist for some of the year.			

Accuracy: Increase the amount of traffic records data that is error-free, satisfies internal consistency checks, and does not exist in duplicate within a single database.

ACR1: Decrease the percentage of crash records with errors in alcohol/drugs, manner of collision, first harmful event/location, and sequence of events, vehicle maneuver and speed.					
YEAR	4/1/13-3/31/14	4/1/14-3/31/15	4/1/15-3/31/16	4/1/16-3/31/17	4/1/17-3/31/18
% with errors					
Alcohol/drugs	6.6%	2.1%	0.8%		
Manner of collision	12.8%	7.8%	3.2%		
First harmful event location	9.3%	6.1%	5.2%		
Sequence of events	11.7%	3.1%	0.0%		
Vehicle maneuver	6.5%	6.5%	3.8%		
Speed	63.0%	55.1%	43.1%		
ACR2: Decrease the percentage of prehospital records with errors in certain fields. (The specific data elements for this performance measure will be inserted in 2016, once EMS has implemented their new integrated system)					
YEAR	2014	2015	2016	2017	2018
% with errors					
ACR3: Decrease the percentage of Trauma Registry records with errors in certain fields (The specific data elements for this performance measure will be inserted in 2016, once EMS has implemented their new integrated system)					
YEAR	2014	2015	2016	2017	2018
% with errors					

ACR4: Decrease the percentage of Emergency Room records with errors in certain fields. (The specific data elements for this performance measure will be inserted in 2016, once EMS has implemented their new integrated system)					
YEAR	2014	2015	2016	2017	2018
% with errors					
ACR5: Decrease the percentage of Hospital Discharge records with errors in certain fields. (The specific data elements for this performance measure will be inserted in 2016, once EMS has implemented their new integrated system)					
YEAR	2014	2015	2016	2017	2018
% with errors					

Completeness: Decrease both the number of records that are missing from the traffic records databases and the number of missing data elements in the records that are in the databases.

C1: Decrease the percentage of crash reports with unknowns or blanks in critical data elements for which unknown is not an acceptable value.					
YEAR	4/1/12-3/31/13	4/1/13-3/31/14	4/1/14-3/31/15	4/1/15-3/31/16	4/1/16-3/31/17
First Harmful Event	1.15%	1.14%	0.59%	0.21%	
Crash Severity	0.13%	0.21%	0.08%	0.00%	
Manner of Collision	0.47%	0.59%	0.24%	0.08%	
C2: Increase the percentage of public roadways with route and milepost (LRS) accurately identified or referenced from 31% to 100%.					
YEAR	2014	2015	2016	2017	2018
% roadways with LRS accurately identified	31%	100%			

Uniformity: Update and maintain the consistency among the files or records in the traffic records systems and how they measure against independent or national standards.

U1: Maintain the number of NEMSIS data elements supported by Utah at 100%.					
YEAR	2014	2015	2016	2017	2018
% Elements	100%	100%			
U2: Increase the percentage in compliance with MMUCC 4.0 reporting standards.					
YEAR	2014	2015	2016	2017	2018
% Elements	66.4%	68.7%			
U3: Increase the number of MIRE Fundamental Data Elements collected on non-local paved roads from 23 to 37.					
YEAR	2014	2015	2016	2017	2018
# Elements	23	23			
U4: Increase the number of MIRE Fundamental Data Elements collected on local paved roads from 7 to 9.					
YEAR	2014	2015	2016	2017	2018
# Elements	7	7			
U5: Maintain the 5 MIRE Fundamental Data Elements being collected on unpaved roads.					
YEAR	2014	2015	2016	2017	2018
# Elements	5	5			

Integration: Increase the ability of records in a database to be linked to a set of records or components thereof in another traffic records database.

I1: Increase the percentage of crash, location, vehicle, driver elements integrated with FARS database.					
YEAR	2014	2015	2016	2017	2018
% elements	0	0			
I2: Increase the number of driver and/crash records integrated for traffic safety analysis purposes.					
YEAR	2014	2015	2016	2017	2018
# records	0	0			
I3: Increase the number of vehicle and crash records integrated for traffic safety analysis purposes.					
YEAR	2014	2015	2016	2017	2018
# records	0	0			
I4: Increase the number of citation and crash records integrated for traffic safety analysis and resource management purposes.					
YEAR	2014	2015	2016	2017	2018
# records	0	0			
I5: Increase the number of crash and emergency department records integrated for traffic safety analysis purposes.					
YEAR	2012	2013	2014	2015	2016
# records	12,334	12,538			

I6: Increase the percentage of records in prehospital file linked to trauma registry within 90 days.					
YEAR	2014	2015	2016	2017	2018
# records	20%	19%			
I7: Increase the percentage of records linked between the prehospital and hospital discharge files.					
YEAR	2014	2015	2016	2017	2018
# records	0				
I8: Increase the percentage of records linked between the Hospital Discharge and Vital Records file.					
YEAR	2014	2015	2016	2017	2018
# records	0				
I9: Increase the number of adjudicated citation records linked to crash records.					
YEAR	2014	2015	2016	2017	2018
# records	0	0			
I10: Increase the percentage of citation records linked to roadway file.					
YEAR	2014	2015	2016	2017	2018
# records	0	0			
I11: Increase the number of roadway jurisdictions that update the statewide roads dataset through a common interface.					
YEAR	2014	2015	2016	2017	2018
# systems	0	0			
I12: Increase the number of roadway attributes and characteristics linked to citation records file.					
YEAR	2014	2015	2016	2017	2018
# roadway elements	0	0			
I13: Increase the number of roadway attributes and characteristics linked to FARS file.					
YEAR	2014	2015	2016	2017	2018
# roadway elements	0	0			

Accessibility: Facilitate the ability of legitimate users to successfully obtain desired data in traffic records systems.

ACS1: Increase percentage of law enforcement agencies and organizations utilizing the official DDACTS Mapping Tool.					
YEAR	2014	2015	2016	2017	2018
# agencies	0	0			
ACS2: Increase the number of users accessing UDOT’s portal for Data requests.					
YEAR	2014	2015	2016	2017	2018
# users	0	252			
ACS3: Increase the number of users accessing IBIS for data requests. (measured by hits, i.e. the number of requests)					
YEAR	2014	2015	2016	2017	2018
# users	217,006	233,492			
ACS4: Increase the number of data requests accessed through Utah Highway Safety Office web site. (Measured by page views of the statistics webpage)					
YEAR	2014	2015	2016	2017	2018
# data requests	5,964	2,187			
ACS5: Maintain the Crash data dictionary so that it is kept up to date, consistent with manuals/reports/training materials, contains edit checks and validation rules, and explains each data element.					
YEAR	2014	2015	2016	2017	2018
Data Dictionary Updated	Yes	Yes			
ACS6: Increase the number of requests for vital records accessed through the online request form.					
YEAR	2014	2015	2016	2017	2018
# data requests	31,816	35,557			

UTAH TRAFFIC RECORDS INFORMATION SYSTEMS DEMONSTRATED MEASURABLE PROGRESS

The provisions of the Section 405(c) grant application require States to demonstrate measurable improvement in at least one of the six core systems. Improvement must be shown in one of the prescribed performance areas of timeliness, accuracy, completeness, uniformity, accessibility, and integration.

In accordance with the requirement, Utah submits the following performance measures as its demonstrated measurable progress for certification FFY2017:

Performance Measure #1				
Performance Area:	Crash Timeliness			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +/-
8.63 days	7.61 days	4/1/2015	3/31/2016	1.02 days
Narrative:	Decrease the mean number of days from the crash date to submission to the crash repository			

Performance Measure #2				
Performance Area:	Crash Timeliness			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +/-
95.58%	96.92%	4/1/2015	3/31/2016	1.34%
Narrative:	Increase the percentage of crash reports submitted into the database within 30 days after the crash			

Performance Measure #3				
Performance Area:	Crash Accuracy			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +/-
Alcohol/drugs 2.1%	0.8%	4/1/2015	3/31/2016	1.3%
Manner of collision 7.8%	3.2%			4.6%
First harmful event location 6.1%	5.2%			0.9%
Sequence of events 3.1%	0.0%			3.1%
Vehicle Maneuver 6.5%	3.8%			2.7%
Speed 55.1%	43.1%			12.0%
Narrative:	Decrease the percentage of crash reports with errors in alcohol/drugs, manner of collision, first harmful event/location, sequence of events, vehicle maneuver, and speed			

Performance Measure #4				
Performance Area:	Crash Completeness			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +/-
First Harmful Event 0.59%	0.21%	4/1/2015	3/31/2016	0.38%
Crash Severity 0.08%	0.00%			0.08%
Manner of Collision 0.24%	0.08%			0.16%
Narrative:	Decrease the percentage of crash reports with unknowns or blanks in critical data elements for which unknown is not an acceptable value			

Recommendations from the State of Utah Traffic Records Assessment Conducted May 12, 2014			
Status for 2017 Highway Safety Plan			
Recommendation	Intend to Implement	Performance Measure(s) to Demonstrate Progress	Reason For Not Implementing
Strategic Planning Recommendations			
Strengthen the TRCC's abilities for strategic planning that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T1-8, ACR1-5, C1-2, U1-2, I1-13, ACS1-6	N/A
Crash Recommendations			
Improve the data dictionary for the Crash data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Yes	ACS5	N/A
Improve the procedures/ process flows for the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T1, T2	N/A
Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	Crash system interfaces with the driver system and the roadway system. Interface with the roadway system, citation/adjudication system, and the injury surveillance system will be possibly implemented in the future.
Improve the data quality control program for the Crash data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Yes	ACR1, C1	N/A
Vehicle Recommendations			
Improve the interfaces with the Vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	Crash data system and citation system interfaces with the vehicle system and driver system.
Improve the data quality control program for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	New vehicle system provides current technology and an environment to provide expanded services to Utah traffic safety stakeholders. Every VIN is validated using RL Polk's VinTelligence software and there is a real time interface to NMVTIS.
Driver Recommendations			
Improve the data dictionary for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	There is no driver system data dictionary in and of itself. However, the Utah Driver Handbook explains all the items that would be in a data dictionary. Also, there are specific

UTAH TRAFFIC RECORDS INFORMATION SYSTEMS STRATEGIC PLAN

			validation rules in the driver system application process.
Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	The driver system is fully compliant with the PDPS and CDLIS. A driver identity and verification process was implemented a few years ago. There is a three level process for edit checks and validation rules.
Roadway Recommendations			
Improve the data dictionary for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	The MIRE Fundamental Data Elements collected are documented in the data dictionary. The data dictionary is updated whenever there is a need to change a database element or attribute. Updates are a collaborative effort between the business unit data steward and the programmer making the change.
Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T5, C2	N/A
Citation/Adjudication Recommendations			
Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I4, I9, I10	N/A
Improve the data quality control program for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T6	N/A
EMS/Injury Surveillance Recommendations			
Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I5, I6, I7, I8	N/A
Improve the data quality control program for the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T7, T8, ACR2, ACR3, ACR3, ACR4, ACR5, U1	N/A
Data Use and Integration Recommendations			
Improve the traffic records systems capacity to integrate data that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I2, I3, I4, I5, I6, I7, I8, I9, I10, I11, I12	N/A