

**IMPLEMENTATION PLAN AND COST
ANALYSIS FOR OREGON'S ONLINE
CRASH REPORTING SYSTEM**

Final Report

SR 500-460



Oregon Department of Transportation

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by

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16. Abstract Federal, state and local transportation agencies, law enforcement, the legislature, consulting firms, safety advocates and the public use crash data to quantify emerging traffic safety issues and problems, determine priorities, support decision-making, and target resources where they will be most effective. In most states, the primary source of crash data is a report completed by police officers. Oregon is different in that it relies heavily on citizens to report crash data via the Oregon Traffic Accident and Insurance (OTAI) paper-based report. Citizens are required to submit the OTAI report to the Driver and Motor Vehicle Services (DMV) within 72 hours after the accident occurs. The main objective of this project was to define the main features, functions, capabilities and system architectures that may be incorporated into an online citizen crash reporting system to complement (and eventually replace) the paper-based OTAI report. The implementation of an online citizen crash reporting system could translate into a number of potential benefits to DMV and the Crash Analysis and Reporting (CAR) Unit. These benefits may include the collection of more accurate, timely, uniform and complete traffic accident data. It is expected that the preliminary design work performed as part of this project will aid the DMV and the CAR Unit in the future development and implementation of an online citizen crash reporting system.					
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SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
<u>LENGTH</u>				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
<u>AREA</u>				
in ²	square inches	645.2	millimeters squared	mm ²
ft ²	square feet	0.093	meters squared	m ²
yd ²	square yards	0.836	meters squared	m ²
ac	acres	0.405	hectares	ha
mi ²	square miles	2.59	kilometers squared	km ²
<u>VOLUME</u>				
fl oz	fluid ounces	29.57	milliliters	ml
gal	gallons	3.785	liters	L
ft ³	cubic feet	0.028	meters cubed	m ³
yd ³	cubic yards	0.765	meters cubed	m ³
NOTE: Volumes greater than 1000 L shall be shown in m ³ .				
<u>MASS</u>				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg
<u>TEMPERATURE (exact)</u>				
°F	Fahrenheit	(F-32)/1.8	Celsius	°C

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
<u>LENGTH</u>				
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
<u>AREA</u>				
mm ²	millimeters squared	0.0016	square inches	in ²
m ²	meters squared	10.764	square feet	ft ²
m ²	meters squared	1.196	square yards	yd ²
ha	hectares	2.47	acres	ac
km ²	kilometers squared	0.386	square miles	mi ²
<u>VOLUME</u>				
ml	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m ³	meters cubed	35.315	cubic feet	ft ³
m ³	meters cubed	1.308	cubic yards	yd ³
<u>MASS</u>				
g	grams	0.035	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams	1.102	short tons (2000 lb)	T
<u>TEMPERATURE (exact)</u>				
°C	Celsius	1.8C+32	Fahrenheit	°F

*SI is the symbol for the International System of Measurement

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	PROJECT OBJECTIVES.....	2
1.2	REPORT ORGANIZATION	2
2.0	REVIEW OF EXISTING ONLINE TRAFFIC REPORTING SYSTEMS	3
2.1	INSURANCE COMMISSION OF WESTERN AUSTRALIA	7
2.2	COLORADO’S ONLINE ACCIDENT REPORTING SYSTEM.....	9
2.3	ARKANSAS’ MOTOR VEHICLE ACCIDENT REPORT	11
2.4	CITY OF WICHITA MOTOR VEHICLE ACCIDENT ON-LINE REPORT.....	12
2.5	UNIVERSITY OF CALIFORNIA SAN DIEGO VEHICLE ACCIDENT/INCIDENT REPORT.....	13
2.6	CITY OF SALINAS CRIME & INCIDENT REPORTING SYSTEM.....	14
2.7	CITY OF RENO POLICE ONLINE REPORTING SYSTEM	15
2.8	ACCIDENT SKETCH INTERFACE.....	17
3.0	REVIEW OF DMV AND CAR UNIT PROCESSES	19
3.1	DMV PROCESS	19
3.2	CAR UNIT PROCESS	23
4.0	DEVELOPMENT OF ALTERNATIVES FOR AN ONLINE CITIZEN CRASH REPORTING SYSTEM.....	27
4.1	ALTERNATIVE #1	27
4.2	ALTERNATIVE #2	28
4.3	ALTERNATIVE #3	29
4.4	COSTS FOR EACH ALTERNATIVE	30
5.0	ONLINE CITIZEN CRASH REPORTING SYSTEM WEB SITE.....	33
5.1	WEBSITE STRUCTURE.....	34
5.1.1	<i>Data Flow</i>	35
5.1.1.1	Section 2 of the DMV report	35
5.1.1.2	Section 1 of the DMV report	35
5.1.1.3	Section 4 of the DMV report	36
5.1.1.4	Section 6 of the DMV report	36
5.1.2	<i>Crash Locator Tool</i>	36
5.1.3	<i>Crash Drawing Tool</i>	37
5.1.4	<i>Seat Locator Tool</i>	38
5.1.5	<i>Car Damage Tool</i>	39
5.2	GENERAL FUNCTIONAL REQUIREMENTS OF THE WEBSITE.....	41
5.3	SECURITY REQUIREMENTS.....	41
5.4	XML DATA FILE	41
6.0	FINAL REMARKS.....	43
7.0	REFERENCES.....	45

APPENDICES

APPENDIX A: FIELD ELEMENTS OF AN ONLINE CITIZEN CRASH REPORTING SYSTEM

LIST OF TABLES

Table 2.1: Online reporting systems excluded from further analysis4
Table 2.2: Criteria used to analyze online citizen reporting systems5
Table 2.3: Online citizen reporting systems analyzed in more detail6
Table 2.4: ICWA’s online crash reporting facility system score table8
Table 2.5: Colorado online accident reporting system score table11
Table 2.6: Arkansas motor vehicle accident report score table12
Table 2.7: City of Wichita motor vehicle accident report score table13
Table 2.8: USDC system score table14
Table 2.9: City of Salinas crime and incident reporting system score table14
Table 2.10: City of Reno police online reporting system score table17
Table 4.1: Advantages and disadvantages of alternative #128
Table 4.2: Advantages and disadvantages of alternative #229
Table 4.3: Advantages and disadvantages of alternative #330
Table 4.4: Preliminary Costs to Implement Alternative Systems31
Table 5.1: Priority scale used to define website requirements33
Table 5.2: Section 2 of the DMV data flow35
Table 5.3: Section 1 of the DMV data flow35
Table 5.4: Section 4 of the DMV data flow36
Table 5.5: Section 6 of the DMV data flow36
Table 5.6: Crash locator tool use cases.....37
Table 5.7: Seat locator tool use cases39
Table 5.8: Use cases for the crash damage locator tool.....40
Table 5.9: Generated files per user41

LIST OF FIGURES

Figure 2.1: ICWA crash locator GIS7
Figure 2.2: ICWA passenger locator7
Figure 2.3: ICWA crash diagram tool8
Figure 2.4: Colorado Online Accident Reporting System Screenshot 19
Figure 2.6: Colorado Online Accident Reporting System Screenshot 310
Figure 2.7: Arkansas’ motor vehicle accident report form.....11
Figure 2.8: City of Wichita motor vehicle accident on-line report form.....12
Figure 2.9: UCSD system screenshot 113
Figure 2.10: City of Salinas crime & incident reporting system screenshot.....14
Figure 2.11: City of Reno Police Online Reporting System Main Page15
Figure 2.12: City of Reno Police Online Reporting System – Traffic Accident Interface 116
Figure 2.13: City of Reno Police Online Reporting System – Traffic Accident Interface 217
Figure 2.14: Accident sketch interface18
Figure 2.15: Accident sketch example18
Figure 3.1: Receiving accident reports process20
Figure 3.2: Matching and coding process.....21
Figure 3.3: Accident insurance verification process.....22

Figure 3.4: Arrival and Distribution of Regular Reports.....	24
Figure 3.5: Arrival and Distribution of Fatal Reports	25
Figure 4.1: High-level Conceptual Diagram for Alternative #1	27
Figure 4.2: High-level Conceptual Diagram for Alternative #2.....	29
Figure 4.3: High-level Conceptual Diagram for Alternative #3.....	30
Figure 5.1: Website structure	34
Figure 5.2: Crash locator concept.....	36
Figure 5.3: Accident sketch interface.	37
Figure 5.4: Accident sketch example.	38
Figure 5.5: Seat locator concept	38
Figure 5.6: Damage locator tool.....	40

1.0 INTRODUCTION

Federal, state and local transportation agencies, law enforcement, the legislature, consulting firms, safety advocates, and the public use crash data to quantify emerging traffic safety issues and problems, determine priorities, support decision-making, and target resources where they will be most effective. Accurate crash data allows for a complete understanding of the nature, causes, and injury outcomes of crashes and facilitates the development of strategies and interventions that will reduce their occurrences and potential consequences (*US DOT 2007*).

In most states, the primary source of crash data is a report completed by police officers. Oregon is different in that it relies heavily on citizens to report crash data on approximately 60% of the estimated 44,000 accidents that occur each year in the state. In Oregon, drivers are required by law to file an Oregon Traffic Accident and Insurance (OTAI) Report to the Driver and Motor Vehicle Services (DMV) within 72 hours if they are involved in an accident resulting in any of the following (*ODOT 2010*):

- Over \$1500 in damages to their vehicles.
- Injury (no matter how minor).
- Death.
- Damage to any one person's property is over \$1500.
- Any vehicle has damage over \$1500 and any vehicle is towed from the scene as a result of damages.

Drivers can obtain a paper copy of the OTAI report at a DMV's branch office or access and print an electronic version of the report from the DMV's website. There are multiple pages to the OTAI report. The first two provide instructions to the driver on how to fill out the report; the next two pages request detailed information about the crash and the driver's insurance; and the final page is supplemental if more than two drivers were involved in the accident. In addition, a Motor Carrier Crash Report has been included in the report packet to ensure that it is readily accessible to Motor Carrier drivers and its personal information is protected under Oregon law (ORS 802.220(5)).

The DMV and the Crash Analysis and Reporting (CAR) Unit are the main users of the data contained in the OTAI report. The DMV is primarily interested in making sure drivers comply with Oregon law requiring motor vehicle insurance and OTAI report filing. CAR uses the information in the report to populate the statewide crash file (*Monsere et al 2005*). Once OTAI reports are received by DMV, there are several manually intensive steps taken for compiling, processing, and transferring the accident information they contain. First, reports that refer to the same accident are bundled into a case file. DMV personnel verify compliance with reporting requirements and insurance. The OTAI reports are then mailed or shuttled to the CAR Unit where information in the crash reports is evaluated for consistency of basic information between reports; location information is verified for accuracy and completeness; and narratives analyzed

to determine appropriate assignment of data elements. Finally, the data is manually coded and entered into the statewide crash data system.

None of these steps are currently automated. Furthermore, the CAR Unit is unable to extract and process the crash data they need until DMV has completed their processing. These issues, coupled with the high volume of OTAI reports submitted by drivers, may significantly compromise both the accuracy and the timeliness of the crash data.

1.1 PROJECT OBJECTIVES

As part of this project, the following objectives were accomplished:

1. Evaluated existing systems that allow citizens to report traffic accident information via the Internet.
2. Identified three preliminary sets of features, functions, capabilities, and system architectures that may be incorporated into an online citizen crash reporting system.
3. Presented the advantages and disadvantages, as well as preliminary cost estimates of the three alternatives to the Technical Advisory Committee (TAC).
4. Mapped all the fields of the OTAI report paper form into equivalent electronic fields for implementation in an online system.
5. Prepared a final report to document findings and recommendations.

1.2 REPORT ORGANIZATION

The rest of this report is organized as follows. Section 2 presents the results of a review of several existing online traffic accident reporting systems. Section 3 presents the analysis performed on the existing processes currently in place at DMV and the CAR Unit to process the OTAI report. Section 4 discusses three preliminary online citizen crash reporting system alternatives developed based on the results of the review included in Section 1 and the customer requirements provided by the DMV and the CAR Unit. Section 5 explains the basic requirements that an online citizen crash reporting system should meet. Finally, section 6 includes final remarks.

2.0 REVIEW OF EXISTING ONLINE TRAFFIC REPORTING SYSTEMS

A review of existing online traffic accident reporting (OTAR) systems was conducted to identify key features that could be useful in the implementation of a similar system in Oregon. This review focused mainly on systems that are web enabled and that also provide a graphical user interface (GUI) to report accident information.

A total of 16 systems were initially reviewed. The first step in the review process was to determine whether a system could be used by citizens or if it was intended exclusively for use by law enforcement agencies to report motor vehicle accidents. If systems were intended for citizen reporting, they were further classified into systems intended only for motor vehicle accident reporting or systems to report other types of incidents (e.g., burglary). Finally, a determination was made as to whether the system was a commercial product offered by a company or it had been developed internally by the organization using it.

Using the criteria mentioned above, eight systems (out of the initial 16 systems reviewed) were excluded from further analysis for the following reasons:

1. Three of the systems are designed to report crash data but can only be used by law enforcement agencies. The systems included in this category are:
 - Michigan State Traffic Car Reporting System (TraCS)
 - Illinois mobile capture & reporting (MCR) system
 - Wisconsin State Traffic Car Reporting System (TraCS)
2. Four systems use a system called Desk Officer Online Reporting System (DORS) developed by the company Coplogic. DORS is an online citizen reporting system intended for the general public, but it focuses on incidents other than crash accidents such as burglary, robbery, and car theft. The following cities (or entities) utilize this system:
 - Arizona: Pima County Sheriff Office
 - California: City of San Francisco
 - California: City of Fremont
 - Ohio: City of Cleveland
3. Finally, the last system excluded from further analysis belongs to the auto insurance company GEICO. This is a custom built website to report crash accidents, but the system could not be analyzed because a user account was required.

Table 2.1 shows a summary of the general characteristics of the systems eliminated from further analysis.

Table 2.1: Online reporting systems excluded from further analysis

ENTITY	SYSTEM NAME	SYSTEM TYPE	SOURCE	URL
Wisconsin State	TraCS	Law enforcement	TraCS	http://www.dot.wisconsin.gov/drivers/drivers/enforce/tracs/users/index.htm
City of San Francisco ¹	SFPD Report System	Incident reporting (Citizen)	Coplogic	http://www.sf-police.org/index.aspx?page=778#vandalism
City of Cleveland, OH ¹	Online Crime Reporting System	Incident reporting (Citizen)	Coplogic	http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/PublicSafety/Division%20of%20Police/Onlinereports
City of Fremont, CA ¹	Fremont Police Department Online Citizen Reporting	Incident reporting (Citizen)	Coplogic	http://www.fremontpolice.org/policerreports/start_report.html
Pima County Sheriff, AZ ¹	Pima County Sheriff Online Reporting	Incident reporting (Citizen)	Coplogic	https://secure.coplogic.com/dors/app?service=page/SelectIncidentType
Michigan State	TraCS	Law enforcement	Custom made	http://www.michigan.gov/msp/0,1607,7-123-1593_24055_35240-170528--,00.html
Illinois State	Illinois Mobile capture and record	Law enforcement	Custom made	http://dot.state.il.us/mcr/contact.html
GEICO	GEICO Online report system	Crash and incident reporting (Citizen)	GEICO	http://www.geico.com/claims/report/

¹ Since the system is the same for all these localities, only the one operated by the city of Reno, Nevada, was chosen to analyze its features.

Table 2.3 on the next page shows the systems whose features were further analyzed. These systems were selected because their characteristics better matched the objectives of this project, i.e., they are available to the general public and their main purpose is to report traffic accident data. The systems shown in Table 2.3 are ordered by how well their characteristics can be useful if a similar system were to be implemented in Oregon to complement the current manual OTAI reporting process.

Table 2.2 shows the main factors that were considered when analyzing the salient features of each system. Additionally, the 10 usability heuristics for user interface design developed by Jakob Nielsen were also considered in the review (*Nielsen 2010*).

Table 2.2: Criteria used to analyze online citizen reporting systems

FACTOR	DEFINITION
Loading time	The time it takes for the website, individual pages and tools to load on the web browser.
Use of verification codes	Indicates if the website uses verification, such as <i>Completely Automated Public Turing Test To Tell Computers and Humans Apart</i> (CAPTCHA) image validation, to prevent spamming programs from using the website.
Visibility of system status	This indicates if the website informs the user of his/her current step in the overall reporting process.
Help button available	Help button availability.
Proximity compatibility	This indicates if controls are close to the elements they control. In some cases, such controls can be far away from each other.
Error feedback	This indicates if the website uses validation features to identify incorrect data types (e.g., letters instead of numbers) when the user enters information.
Recognition rather than recall	This indicates how easy it is to navigate through the website by only recognizing the elements the user needs rather than trying to memorize information.
Save report feature	This indicates if the website has a feature to save a report to edit it later.
Drop down menus	This indicates if the website has drop down menus to limit the options the user can input. This greatly increases the quality of the data.

The following subsections describe each of the systems listed in Table 2.3 in more detail.

Table 2.3: Online citizen reporting systems analyzed in more detail

ENTITY	SYSTEM NAME	SYSTEM TYPE	SOURCE	URL
Insurance Commission of Western Australia	Online Crash Reporting Facility	Crash report (Citizen)	Custom made	https://www.crashreport.com.au/
Colorado State	Colorado Online Accident Reporting	Crash report (Citizen)	Custom made	https://crash.state.co.us/
Arkansas State	Arkansas Motor Vehicle Accident Report (SR-1)	Crash report (Citizen)	Custom made	https://www.ark.org/dfa/sr1/index.html
City of Wichita Kansas	Motor vehicle accident on-line report	Crash report (Citizen)	Custom made	https://www.wichita.gov/CityOfWichita/Templates/Form.aspx?NRMODE=Published&NRORIGINALURL=/CityOffices/Police/Forms/AccidentReport.htm&NRNODEGUID={FDABF1E6-1714-454D-96C5-A8D9A0AAA3F4}&NRCACHEHINT=Guest
University of California San Diego	Ucsd vehicle accident/incident report	Crash and incident report (Citizen)	Blink (part of the university)	http://blink.ucsd.edu/facilities/transportation/vehicle/accidents.html
City of Salinas, CA	Crime & Incident Report	Incident reporting (Citizen)	Custom made	http://www.salinaspd.com/online_services/crime_incident.html
City of Reno NV	Police Online Reporting System	Incident reporting (Citizen)	Coplogic	http://www.reno.gov/Index.aspx?page=1267
ClaimMS GmbH	Accident sketch	Non crash related system	Custom made	http://draw.accidentsketch.com/

2.1 INSURANCE COMMISSION OF WESTERN AUSTRALIA

The Insurance Commission of Western Australia (ICWA) Online Crash Reporting Facility system has many characteristics that make it a good starting point for the design of a similar system in Oregon. It includes a very user friendly interface and a geographic information system (GIS) interface (similar to Google maps) that helps the user to first locate on a map the exact location of the crash, as depicted in Figure 2.1.

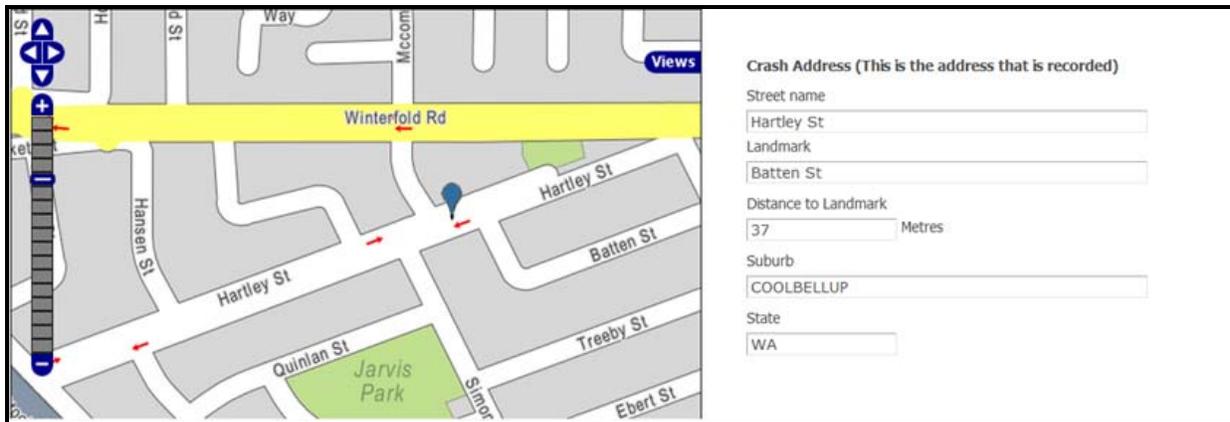


Figure 2.1: ICWA crash locator GIS

Another interesting feature of this website is the ability to select the location of each passenger on the vehicle when the crash occurred. This interface is depicted in Figure 2.2.

The image displays a web form titled 'Your vehicle and passenger details'. The form is divided into two main sections. The left section contains a list of input fields for passenger information: 'Given Names', 'Family Name', 'Date of Birth' (with dropdown menus for month and year), 'Sex' (with a dropdown menu), 'Address Line 1', 'Address Line 2', 'Suburb', 'Post code', 'State' (with a dropdown menu), 'Mobile Phone', 'Home Phone', 'Work Phone', 'Email Address', 'Occupation', and 'Employer'. The right section features a seating diagram of a vehicle interior with three rows of three seats each. The top row has a yellow seat on the left, a grey seat in the middle, and a purple seat on the right. Below the diagram is a 'Save this passenger' button. A text box above the diagram provides instructions: 'Use your left mouse button to indicate the position in which the passenger was sitting. Once completed, click on the "Save this passenger" button.' At the bottom of the form, there is a checkbox labeled 'Please select if the passenger was wearing a seat belt *' and a footer with 'Version: 2.0.26.1 Revision: 3908M' and 'Previous' and 'Next' buttons.

Figure 2.2: ICWA passenger locator

The ICWA’s Online Crash Reporting Facility website also offers an excellent drawing tool to sketch the details of the accident. This tool includes many road elements, vehicles and even animal figures that can be dragged onto the screen to generate a diagram of the crash situation. The drawing tool interface is depicted in Figure 2.3.

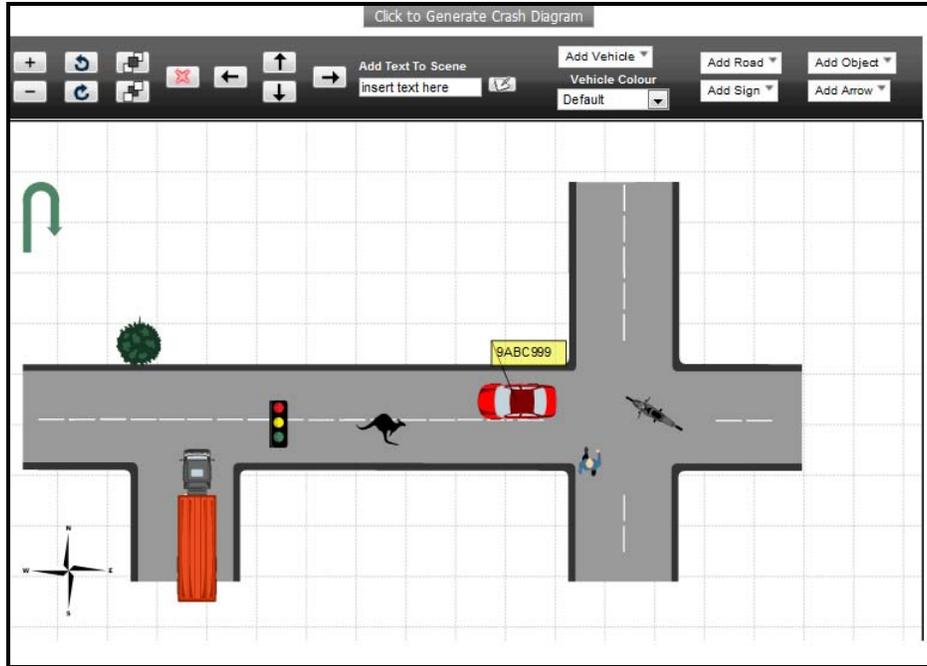


Figure 2.3: ICWA crash diagram tool

Table 2.4 shows the final score given to the ICWA’s Online Crash Reporting Facility website based on the factors described in Table 2.2.

Table 2.4: ICWA’s online crash reporting facility system score table

FACTOR	RATING
Loading time	Long.
Use of verification codes	Yes.
Visibility of system status	Yes. Uses a progress bar.
Help button available	Yes.
Proximity compatibility	Bad. Drop down windows appear far from click point sometimes.
Error feedback	Good. Validation in many input boxes.
Recognition rather than recall	Good use of interactive maps to recognize location of crash. However, the features of the crash section use a lot of memory resources.
Save report feature	Can opt to save the report and then logout and continue with the report some other day. No account needs to be created, just a report ID and a password.
Drop down menus	Yes.

2.2 COLORADO'S ONLINE ACCIDENT REPORTING SYSTEM

The Colorado Online Accident Reporting system is statewide internet application provided by the Colorado State Patrol. It is a custom made system that provides a simple user interface without long loading times. Figure 2.4 depicts a screenshot of one of the pages of the system.

Vehicle Type
 Pedestrian Car/Truck Motorcycle Bicycle
 Check this box, if Your Vehicle was PARKED

Your Information
Last Name * s First Name * s MI
Address * 22
City * s State * CO Zip * 88889
Phone #

Your State ID Information
ID/Driver Lic.# State
Gender * Male Birthdate 01/23/1978 i.e. 01/23/1980

Your Vehicle Information
Vehicle Year 2000 i.e. 2000 Make Ford Model
License Plate State
Body Type CHOOSE BODY TYPE
Color VIN

Vehicle Owner Same as Driver*
Check if the driver is the owner and you may skip to insurance section.

Vehicle Owner Information
Last Name s First Name s MI
OR*
Company Use for commercially owned vehicles
Address 22
City s State Zip 88889
Phone #

Vehicle or Property Insurance Information
Company* kiza
Policy #* 888
Exp. Date* 01/23/2011 i.e. 01/23/2000

Figure 2.4: Colorado Online Accident Reporting System Screenshot 1

One of the relevant features of this system is that it allows the user the ability to provide an email address to save a report and complete it later. The screenshot where this information is entered by the user is depicted in Figure 2.5. Before submitting the accident report, the user is allowed to review all the entered information, as depicted in Figure 2.6.

Colorado Online Accident Report

Instructions
 This site can only be used for accidents less than 60 days ago (07/01/10 or later).
 A red asterisk (*) denotes required information.
 For more information about a field, hold your mouse cursor over the ?

Accident Information

Please enter your email address and create a password in case you need to save a report and return to it later. If you do not enter an email address and password you will not be able to return to a saved report. You cannot edit a report once it has been submitted.

Email

Password is only required if you are providing an Email address.

Password

Confirm Password

Accident Date i.e. 01/01/2010

Time i.e. 12:30 AM PM

Vehicles/Properties 1 to 6 (1 for your vehicle, plus up to 5 additional properties/vehicles).
 If you hit middle and yours is the only vehicle or property involved, enter '1'.
 If you were involved in a hit and run accident and do not have information on the other driver/vehicle involved, enter '1'.

County Select County

Location of Accident:

Name of Additional Location:

Direction to Additional Location:

Distance to Additional Location: Miles

Please check all that apply.

Accident Alert

Damage estimated at less than \$1000

Private Property

Figure 2.5: Colorado Online Accident Reporting System Screenshot 2

Accident Information

Date 08/30/2010

Time 12:20 AM

Vehicles/Properties 1

County Denver

Location

Name of Roadway or Address of Property:

Direction to Additional Location: West

Distance to Additional Location: Miles

Accident Alert No

Damage estimated at less than \$1000 No

Public Property No

Your Vehicle

Vehicle Type Car/Truck

Last Name s **First Name** s **MI**

Address 22

City s **State** CO **Zip** 88889

ID/Driver Lic.# **State**

Gender Male **Birthdate** 01/23/1978

Vehicle Year 2000 **Make** Ford **Model**

License Plate **State**

Body Type NA

Vehicle Owner Same as Driver

Insurance Information

Company kiza

Policy # 888

Exp. Date 01/23/2011

Figure 2.6: Colorado Online Accident Reporting System Screenshot 3

Table 2.5 shows the score table for the Colorado Online Accident Reporting system website based on the factors described in Table 2.2.

Table 2.5: Colorado online accident reporting system score table

FACTOR	RATING
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	It does not indicate what step in the process is currently shown.
Help button available	Yes, for some of the sections only.
Proximity compatibility	Good.
Error feedback	Provided in some areas.
Recognition rather than recall	Uses a lot of memory resources.
Save report feature	Yes, however an email is required.
Drop down menus	No.

2.3 ARKANSAS’ MOTOR VEHICLE ACCIDENT REPORT

The Arkansas’ motor vehicle accident report provides a single web page for the user to enter information pertaining to the accident. No save option is provided. Figure 2.7 depicts the system’s main form.

The form is titled "Your Vehicle Description and License Information" and contains the following fields:

- Vehicle Make:
- Vehicle Year:
- Vehicle License No.:
- State:

The second section is titled "Accident Information" and contains the following fields:

- Accident Location (city/town):
- Roadway Name:
- Date of Accident: (mm/dd/yyyy)
- Time of Accident:

The third section is titled "Property Damage Information" and contains the following fields:

- Cost of repairing vehicle or replacing if total loss: \$ (must be in dollar amount)
- Cost of damage to other property: \$ (must be in dollar amount)
- Property Description:
- Description of Accident:

Figure 2.7: Arkansas’ motor vehicle accident report form

Table 2.6 shows the score table for the Arkansas’ motor vehicle accident report website based on the factors described in Table 2.2.

Table 2.6: Arkansas motor vehicle accident report score table

FACTOR	DEFINITION
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	Not required (single web page).
Help button available	No.
Proximity compatibility	Good.
Error feedback	No.
Recognition rather than recall	No interactive maps or similar features.
Save report feature	No.
Drop down menus	No.

2.4 CITY OF WICHITA MOTOR VEHICLE ACCIDENT ON-LINE REPORT

The City of Wichita (Kansas) motor vehicle accident on-line report is also a one-page web. The single web form is divided into the following four sections (see Figure 2.8):

- Contact information.
- Driver and vehicle information.
- Other driver and vehicle information.
- Vehicle passengers.

This system is basically an insurance report rather than a report for the department of motor vehicles. The data fields in the one-page form are not evenly spaced and there are not many features that would provide the user with help while filling out the form.

Other Driver and Vehicle Information
Please fill in all information on other vehicle if know.

Name (first, middle, last) Race Ethnic Date of Birth Social Security Number

DL State DL Number DL Type SEX Male Female Type of seat belt used. Lap Belt Shoulder Belt Child Res.

Street Address
 Address (cont.)
 City State/Province Zip/Postal Code

Home Phone Work Phone

Year / Make of Vehicle Vehicle Color Vehicle Model or Body Style
 License Plate State License Plate Number License Plate Year
 # of Occupants Odometer / Mileage Vehicle Identification Number (VIN)

Insurance Company Name Policy Number Agents Name & Phone

Figure 2.8: City of Wichita motor vehicle accident on-line report form

Table 2.7 shows the score table for the City of Wichita’s motor vehicle accident on-line report website based on the factors described in Table 2.2.

Table 2.7: City of Wichita motor vehicle accident report score table

FACTOR	DEFINITION
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	Not required.
Help button available	No.
Proximity compatibility	Bad, text boxes are too scattered.
Error feedback	No.
Recognition rather than recall	No interactive maps or similar features.
Save report feature	No.
Drop down menus	No.

2.5 UNIVERSITY OF CALIFORNIA SAN DIEGO VEHICLE ACCIDENT/INCIDENT REPORT

The University of California San Diego (UCSD) vehicle accident/incident report consists of a single form where either students or employees can report crashes involving university vehicles. The user interface is very simple and allows a user to enter basic information about the crash. Figure 2.9 depicts the main form of this vehicle accident/incident reporting system.

Figure 2.9: UCSD system screenshot 1

Table 2.8 shows the score table for the UCSD’s vehicle accident/incident reporting system based on the factors described in Table 2.2.

Table 2.8: USDC system score table

FACTOR	DEFINITION
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	Not required.
Help button available	No.
Proximity compatibility	Form could be more compact.
Error feedback	No.
Recognition rather than recall	No interactive maps or similar features.
Save report feature	No.
Drop down menus	No.

2.6 CITY OF SALINAS CRIME & INCIDENT REPORTING SYSTEM

The City of Salinas (California) crime and incident reporting system consists of a single web form. The user interface is very simple and does not provide neither a save option nor a help feature. Figure 2.10 depicts a screenshot of the system.

The screenshot shows a web form with a light gray background and a dark border. At the top, the text 'YOUR INFORMATION' is displayed in blue. Below this, there are three input fields, each with a label above it: 'Name', 'Victim's Name (if different than above)', and 'Your Age'. Each label is in blue text, and each input field is a simple white rectangle with a thin gray border.

Figure 2.10: City of Salinas crime & incident reporting system screenshot

Table 2.9 shows the score table for the City of Salinas' crime & incident reporting system based on the factors described in Table 2.2.

Table 2.9: City of Salinas crime and incident reporting system score table

FACTOR	DEFINITION
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	Not required.
Help button available	No.
Proximity compatibility	Good.
Error feedback	No.
Recognition rather than recall	No interactive maps or similar features.
Save report feature	No.
Drop down menus	No.

2.7 CITY OF RENO POLICE ONLINE REPORTING SYSTEM

This system was developed by Coplogic and the City of Reno is one of a handful of U.S. entities that use it. The system can be used to report a variety of incidents including burglary, destruction of property, identity theft, etc. Vehicle related incidents that can be reported through this system include vehicle burglary, vehicle tampering and traffic accidents. If a user is reporting a traffic accident, a choice is given to complete the DMV SR-1 Report of Traffic Accident paper form instead. Figure 2.11 depicts a portion of the system’s initial screen where the user selects the type of incident being reported.

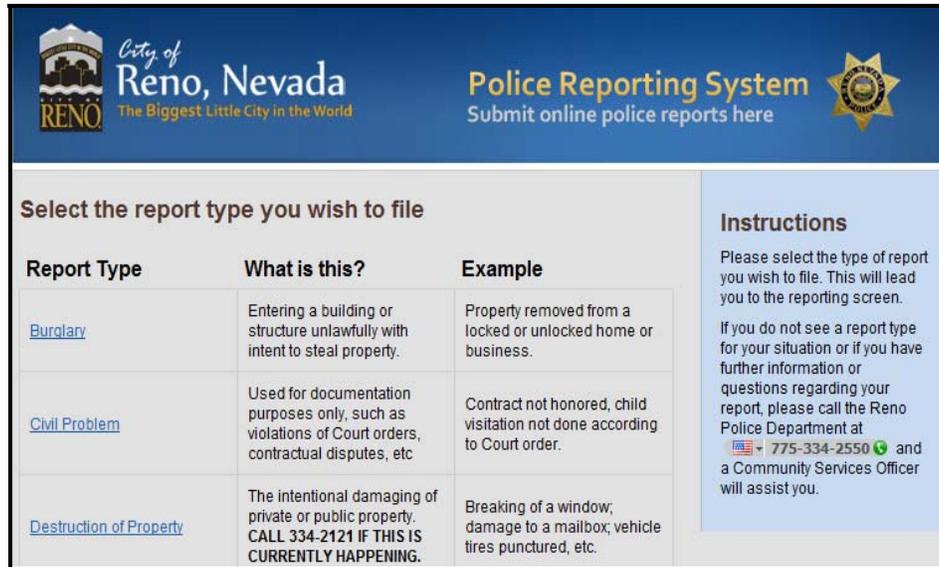


Figure 2.11: City of Reno Police Online Reporting System Main Page

Figure 2.12 and Figure 2.13 depict a couple more screenshots of the system. A useful feature provided in most pages is the drop down menus when selecting, for example, the vehicle type.



City of Reno, Nevada
The Biggest Little City in the World

Police Reporting System
Submit online police reports here

Traffic Accident : [Start](#) > [Yourself](#) > Incident > Person > Vehicle > Property > Review > Finish

Enter Reporting Person Information

Please enter your information as completely as possible. You may be contacted regarding this incident. An email address is required if you would like to be notified when this report is received and approved. If you do not have an email address please list your phone number followed by @reno.gov in the email block, i.e. 7753342181@reno.gov.

*First Name	<input type="text"/>										
*Last Name	<input type="text"/>										
*Home Address	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">St #</td> <td style="border: none;">St Dir</td> <td style="border: none;">St Name</td> <td style="border: none;">St Type</td> <td style="border: none;">Apt/Unit</td> </tr> <tr> <td style="border: none;"><input type="text"/></td> </tr> </table>	St #	St Dir	St Name	St Type	Apt/Unit	<input type="text"/>				
St #	St Dir	St Name	St Type	Apt/Unit							
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>							
* City / State / Zip Code	<table style="width: 100%; border: none;"> <tr> <td style="border: none;"><input type="text" value="Reno"/></td> <td style="border: none;"><input type="text" value="Nevada"/></td> <td style="border: none;"><input type="text"/></td> </tr> </table>	<input type="text" value="Reno"/>	<input type="text" value="Nevada"/>	<input type="text"/>							
<input type="text" value="Reno"/>	<input type="text" value="Nevada"/>	<input type="text"/>									
*Home Phone	<input type="text"/> (ex: 555-111-2222 - The system will auto-insert the dashes)										
* Email	<input type="text"/>										
* Confirm Email	<input type="text"/>										
Employer Name	<input type="text"/>										
Work Address	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">St #</td> <td style="border: none;">St Dir</td> <td style="border: none;">St Name</td> <td style="border: none;">St Type</td> <td style="border: none;">Apt/Unit</td> </tr> <tr> <td style="border: none;"><input type="text"/></td> </tr> </table>	St #	St Dir	St Name	St Type	Apt/Unit	<input type="text"/>				
St #	St Dir	St Name	St Type	Apt/Unit							
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>							
City / State / Zip Code	<input type="text"/> Please Select <input type="text"/>										
Work Phone	<input type="text"/> Ext <input type="text"/> (ex: 415-556-7899 X 123)										
*Race	Please Select <input type="text"/>										
*Sex	Please Select <input type="text"/>										
*DOB	Month <input type="text"/> Day <input type="text"/> Year <input type="text"/>										
SSN	<input type="text"/> (ex: 123-45-6789 - The system will auto-insert the dashes)										
*Eye Color	Please Select <input type="text"/>										
*Hair Color	Please Select <input type="text"/>										
*Driver License No	<input type="text"/>										
*Licensing State	Please Select <input type="text"/>										

<<<< Back
Continue >

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Figure 2.12: City of Reno Police Online Reporting System – Traffic Accident Interface 1

Figure 2.13: City of Reno Police Online Reporting System – Traffic Accident Interface 2

Table 2.10 shows the score table for the City of Salinas’ crime & incident reporting system based on the factors described in Table 2.2.

Table 2.10: City of Reno police online reporting system score table

FACTOR	DEFINITION
Loading time	Fast.
Use of verification codes	No.
Visibility of system status	Yes (Progress bar).
Help button available	No. Also when reading some fields, it is not clear what they mean.
Proximity compatibility	Good.
Error feedback	Yes, after pressing the next button to go to the next form. System checks the address for jurisdiction purposes.
Recognition rather than recall	No interactive maps or anything like that.
Save report feature	No.
Drop down menus	Yes.

2.8 ACCIDENT SKETCH INTERFACE

The accident sketch interface is a tool developed by the company ClaimMS GmbH located in Germany. This is a free tool designed to allow a user to draw a sketch of a car accident. It consists of a drag and drop interface where the user can select and place vehicles, roads and

traffic signs and thus create a detailed situation of the accident. Figure 2.14 depicts the initial interface of the tool, whereas Figure 2.15 shows an example of a simple sketch generated with the sketching tool.

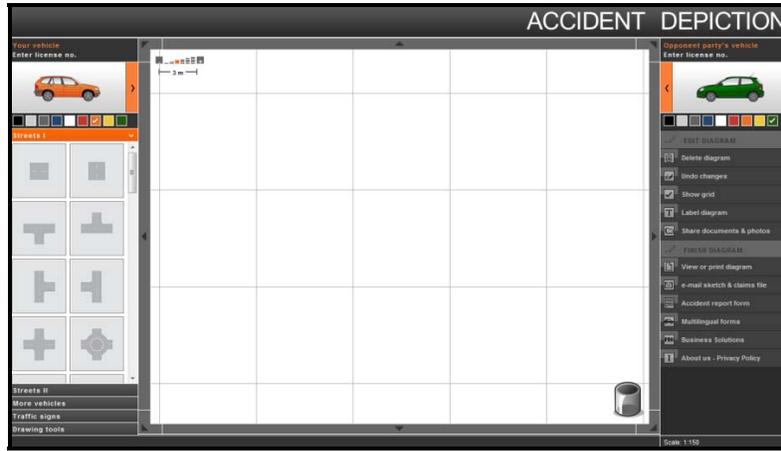


Figure 2.14: Accident sketch interface



Figure 2.15: Accident sketch example

This system is an excellent guideline to create a similar tool for an online report system for Oregon. If possible, contact should be established with the company to explore the possibility of using this tool directly in an ODOT website.

Since a citizen cannot report a traffic accident via the accident sketch interface, no score table is provided for this system.

3.0 REVIEW OF DMV AND CAR UNIT PROCESSES

An analysis was performed on the existing processes currently in place at DMV and the CAR Unit to process the Oregon Traffic Accident and Insurance (OTAI) report. The objectives of this analysis were (1) to better understand the current manual processes followed at both the DMV and the CAR Unit, and (2) to identify the advantages and disadvantages of utilizing an online citizen reporting system to complement the existing processes.

Several interviews and email information exchanges were conducted with members of each ODOT unit (in particular, specialists and coders) to gain a level of understanding of their processes that was adequate for the scope of the project.

3.1 DMV PROCESS

Interviews were conducted with DVM personnel to prepare an overview of their processes. The DMV personnel provided a walkthrough of the process detailing every step, the locations of the arriving OTAI reports, their temporary storage and processing stations. Block diagrams and a narrative of the process were also provided. Based on this information, the DMV process can be broken down in three sub processes:

- **Receiving accident reports process:** This sub process starts when the OTAI reports are received at the DMV office. The mail clerk sorts them and either sends them to the unmatched file for processing or to the pending clerk.
- **Matching and coding process:** Reports processing clerks pull out OTAI reports from the unmatched file and start working on them verifying, for example, insurance or date of the report to see if it is an old accident report.
- **Accident insurance verification process:** This sub process involves the verification of the insurance mainly by the financial responsibility clerk.

A preliminary diagram was created for each sub process and shared with the DMV team for feedback. Final versions of each diagram for each sub process were developed once all the feedback was incorporated and are shown in Figure 3.1, Figure 3.2, and Figure 3.3, respectively.

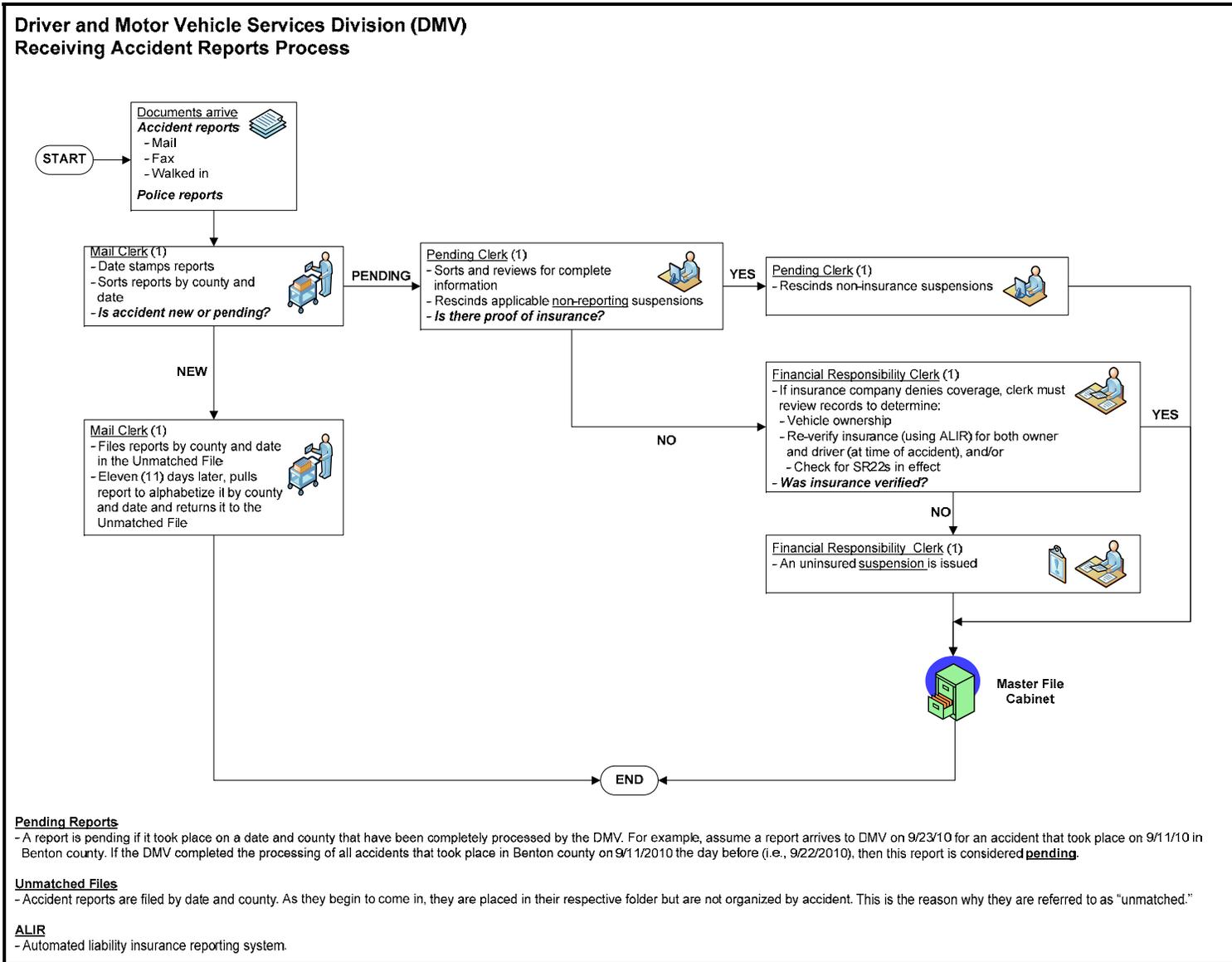


Figure 3.1: Receiving accident reports process

Driver and Motor Vehicle Services Division (DMV) Matching and Coding Process

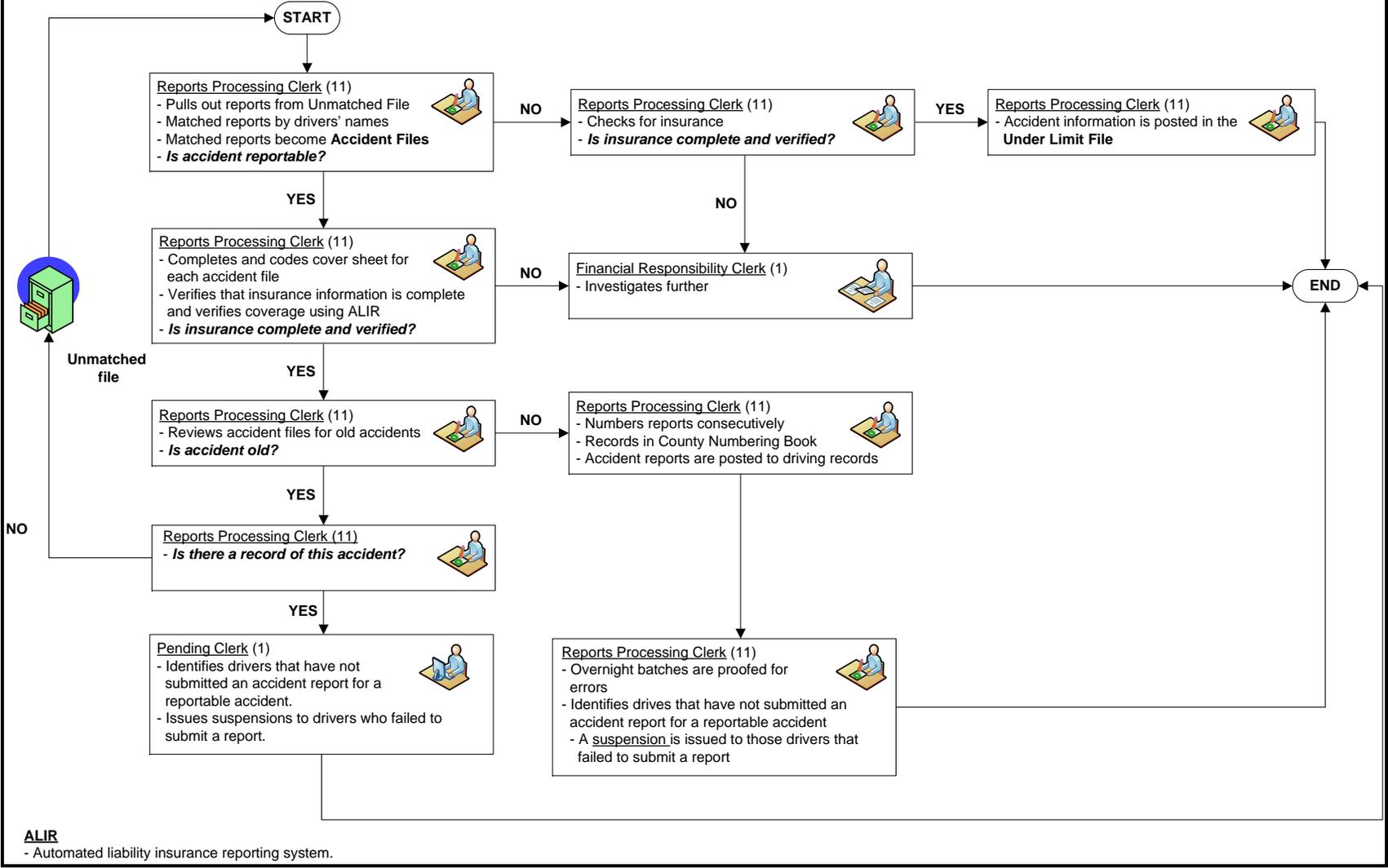


Figure 3.2: Matching and coding process

Driver and Motor Vehicle Services Division (DMV) Accident Insurance Verification Process

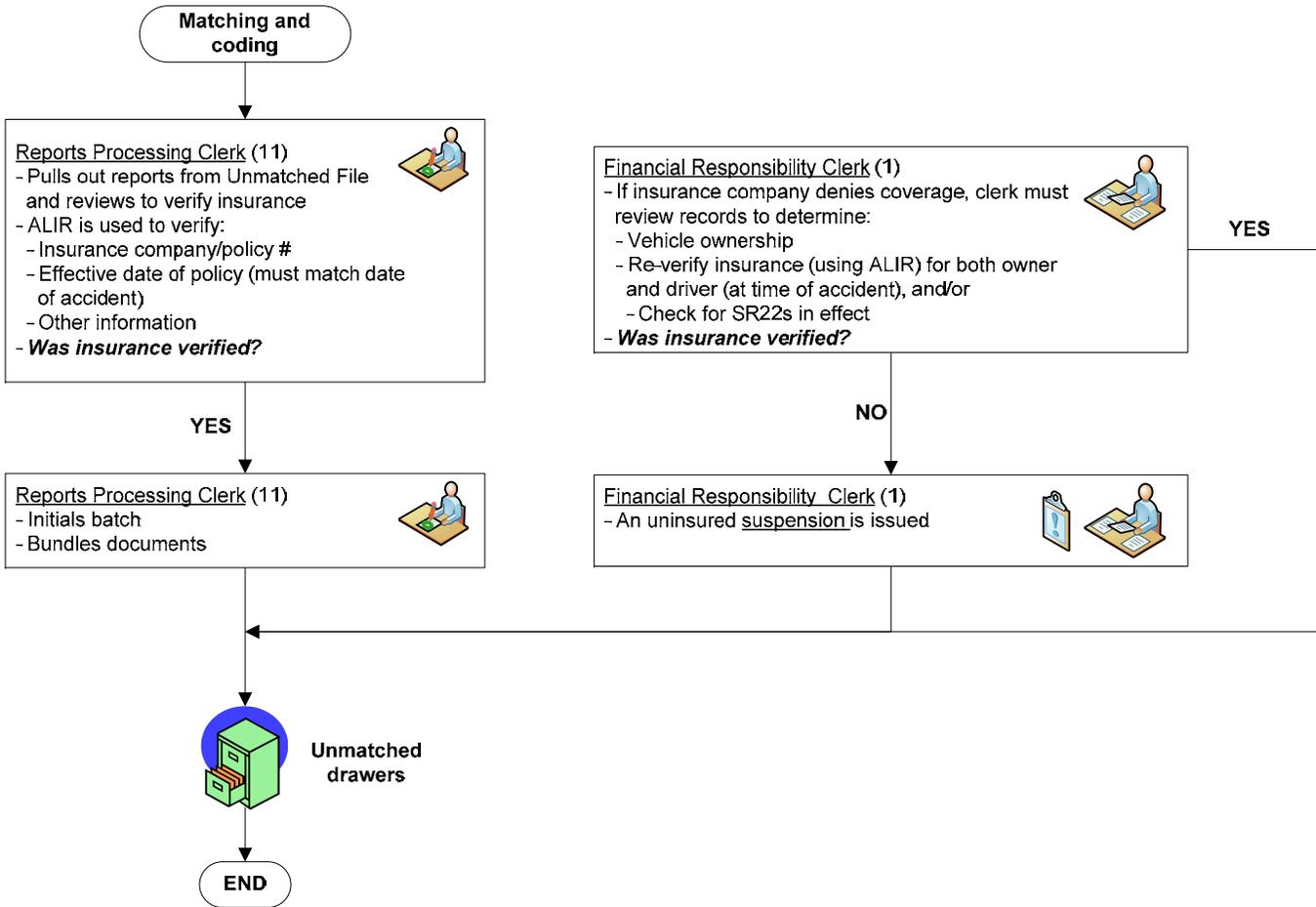


Figure 3.3: Accident insurance verification process

3.2 CAR UNIT PROCESS

Interviews were also conducted with personnel of the CAR Unit to map their process. Based on the information collected, the CAR Unit process can be divided into the following two sub processes:

- **Arrival and Distribution of Regular reports:** These are non fatal reports from DMV.
- **Arrival and Distribution of Fatal reports:** These are fatal reports which need significantly more information to be processed than regular reports.

A preliminary diagram was created for each sub process and shared with the CAR Unit team for feedback. Final versions of each diagram for each sub process were developed once all the feedback was incorporated and are shown in Figure 3.4 and Figure 3.5, respectively.

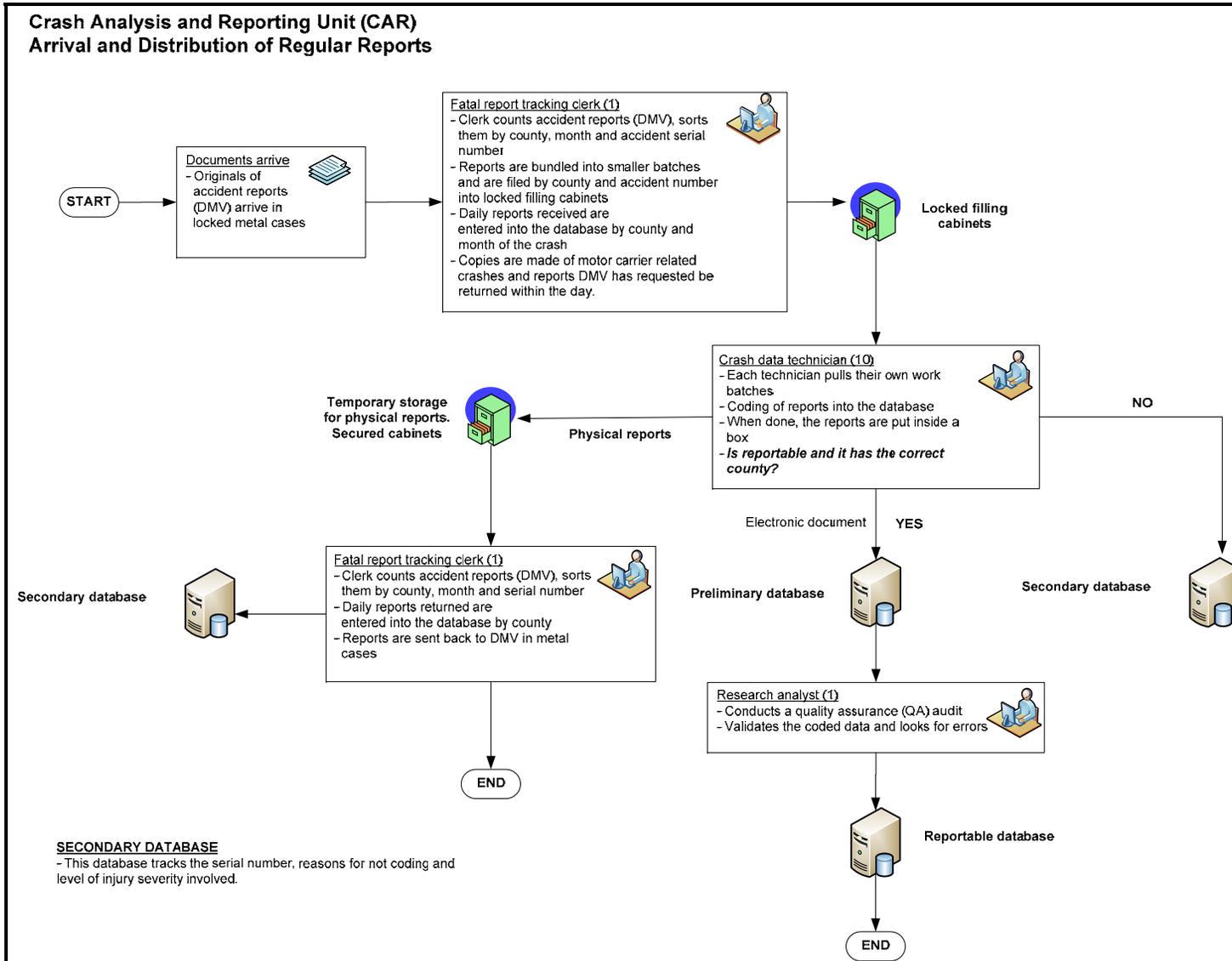


Figure 3.4: Arrival and Distribution of Regular Reports

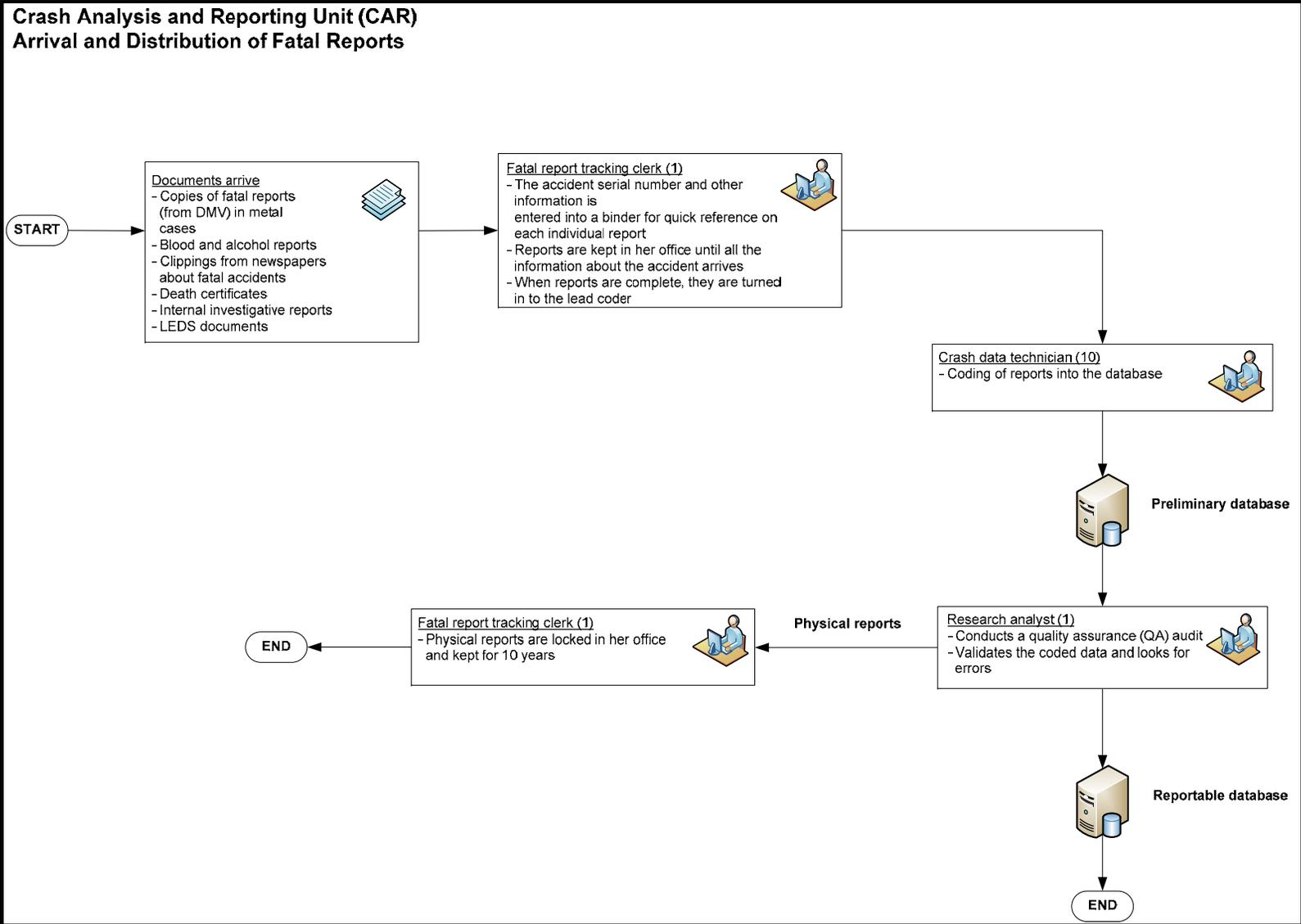


Figure 3.5: Arrival and Distribution of Fatal Reports

4.0 DEVELOPMENT OF ALTERNATIVES FOR AN ONLINE CITIZEN CRASH REPORTING SYSTEM

A comprehensive review of existing *police* traffic accident reporting systems and *citizen* traffic accident reporting systems was conducted to benchmark their salient features. Based on the results of this review and the customer requirements provided by the Oregon Department of Transportation (ODOT) DMV and CAR Unit, three preliminary online citizen crash reporting system alternatives have been developed. The main features of each alternative are presented in the next subsections.

4.1 ALTERNATIVE #1

The high-level conceptual diagram for alternative #1 is shown in Figure 4.1. In this alternative, a simple electronic form (e.g., PDF-based) would be used to collect traffic accident information from citizens. However, none of the data collected from citizens would be permanently stored in a database for future use.

A connection to a database storing DMV records would be needed so that data lookups can be performed. For example, some of the fields shown in Figure 4.1 such as *Name* and *Address* would be automatically populated in the form after the citizen enters his or her drive license (DL) number. This functionality would make the interface of the electronic version of the accident report more user-friendly and also would minimize data entry errors. Other fields could be automatically populated (such as the *Date* field shown in Figure 4.1). Critical fields in the traffic accident report could be cross-checked to improve data accuracy.

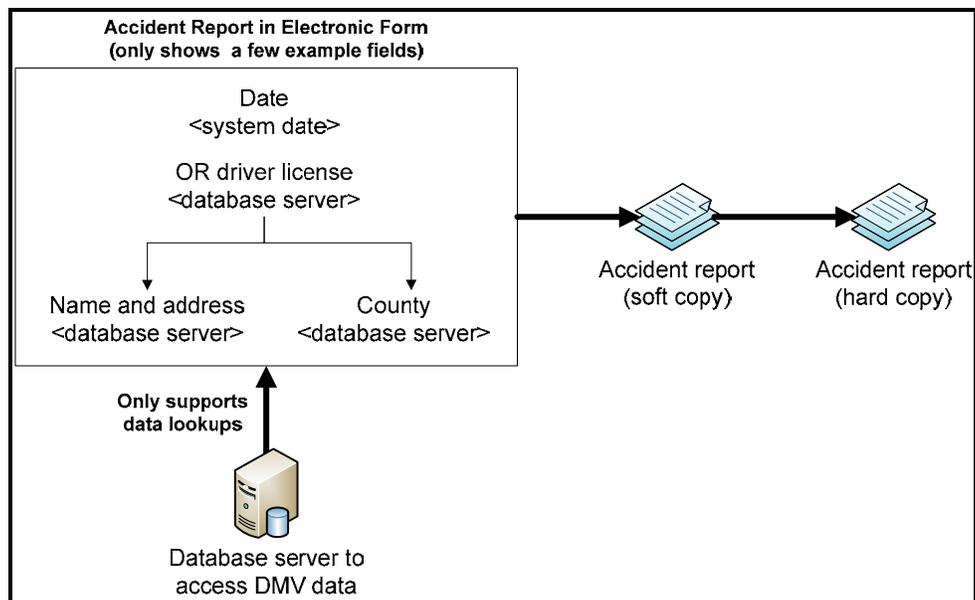


Figure 4.1: High-level Conceptual Diagram for Alternative #1

The expected output of alternative #1 would be a soft copy of the final accident report that can be automatically emailed to the DMV and also saved by citizens for their records. A hard copy of the accident report could be printed by either the DMV or the CAR Unit personnel, if necessary. Table 4.1 summarizes the advantages and disadvantages of alternative #1.

Table 4.1: Advantages and disadvantages of alternative #1

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> • Data entered by citizens can be verified and validated. • Critical fields that help in decision making can be flagged (e.g., highlighted with color). • Availability of a GIS interface to describe accident. • Easier to develop and maintain. • Less expensive. • No database maintenance needed. 	<ul style="list-style-type: none"> • Data entered by citizens cannot be saved: <ul style="list-style-type: none"> - Personal data - GIS data • Does not allow future growth.

4.2 ALTERNATIVE #2

The high-level conceptual diagram for alternative #2 is shown in Figure 4.2. In this alternative, a web-based multi-page form would be used to collect traffic accident information from citizens. All data collected would be saved and stored permanently in a database that can be accessed by authorized DMV and CAR Unit personnel to complete their respective unit-level business processes.

As with system alternative #1, a connection to a database storing DMV records would be needed so that data lookups can be performed. For example, some of the fields shown in Figure 4.2 such as *name* and *address* would be automatically populated in the form after the citizen enters his or her drive license (DL) number. This functionality would make the web-based form interface more user-friendly and also would minimize data entry errors. Other fields could be automatically populated (such as the date field shown in Figure 4.2). Critical fields in the traffic accident report could be cross-checked to improve data accuracy.

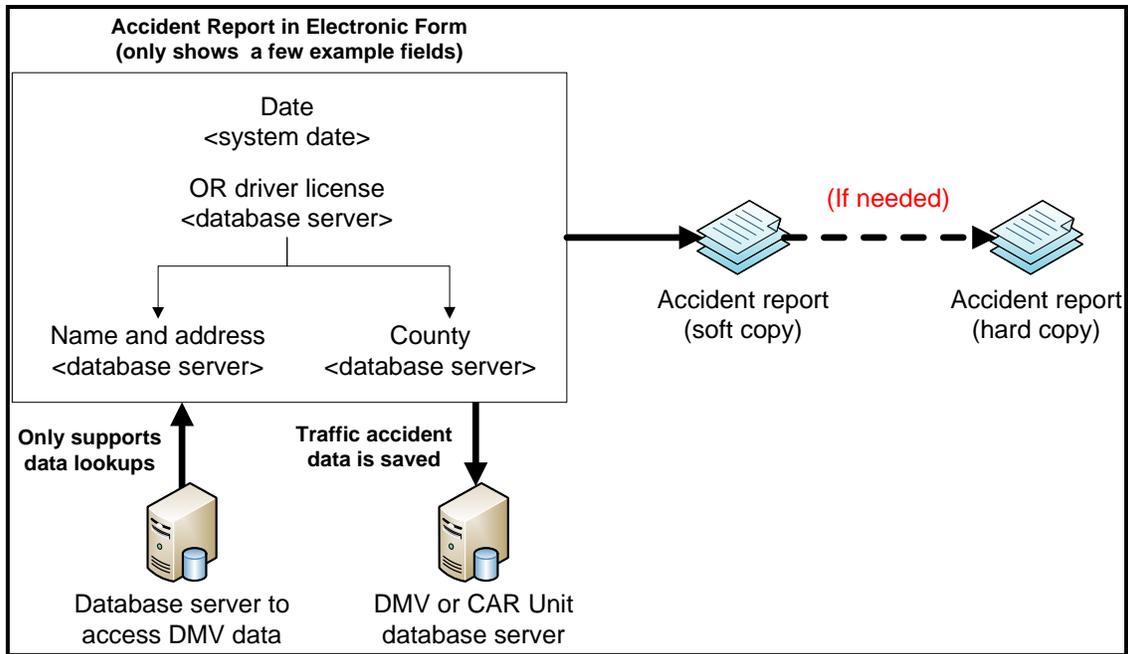


Figure 4.2: High-level Conceptual Diagram for Alternative #2

The expected output of system alternative #2 would be traffic accident data saved to a database. Alternatively, a soft copy of the final traffic accident report could be automatically emailed to the DMV and also saved by the citizens for their records. A hard copy of the report could be printed by either DMV or CAR unit personnel, if necessary. Table 4.2 summarizes the advantages and disadvantages of system alternative #2.

Table 4.2: Advantages and disadvantages of alternative #2

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> • Data entered by citizens can be verified and validated. • Critical fields that help in decision making can be flagged (e.g., highlighted with color). • Availability of a GIS interface to describe accident. • Data entered by citizens can be saved: <ul style="list-style-type: none"> - Personal data - GIS data - Allows future growth. 	<ul style="list-style-type: none"> • More difficult to develop and maintain. • More expensive.

4.3 ALTERNATIVE #3

The high-level conceptual diagram for alternative #3 is shown in Figure 4.3. Alternative #3 would provide all the functionality of alternative #2, including the design and implementation of code in the web-based interface to enable future storage of traffic accident data. However, the database included in alternative #2 to permanently store traffic accident data would only be developed conceptually (i.e., it will not implemented physically).

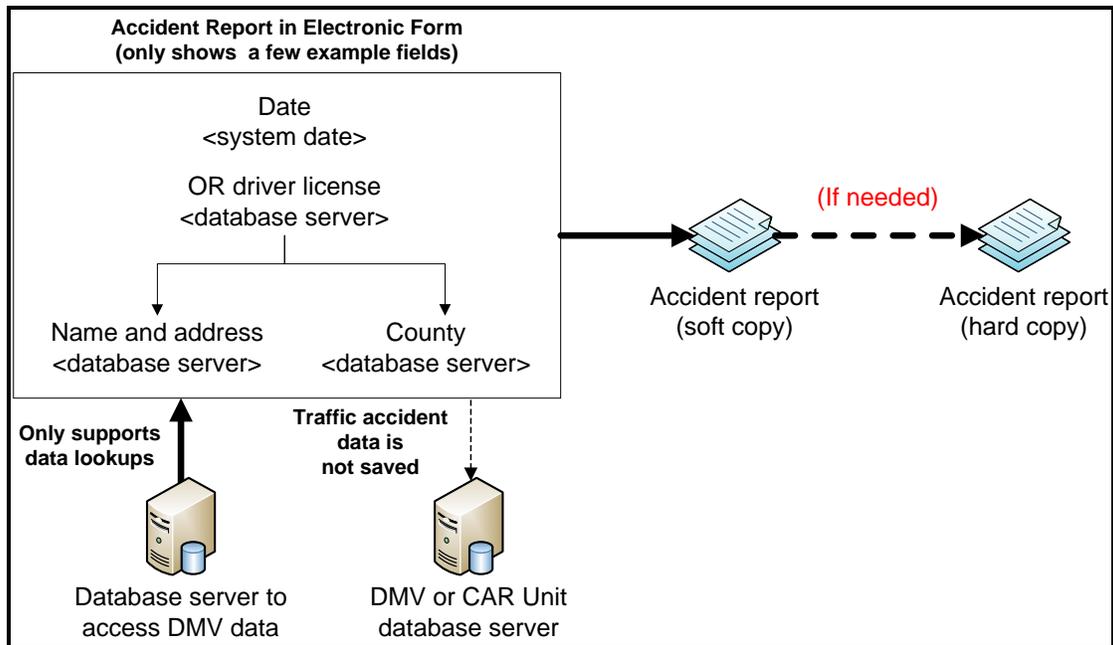


Figure 4.3: High-level Conceptual Diagram for Alternative #3

The expected output of system alternative #3 would be traffic accident data saved to a database. Alternatively, a soft copy of the final traffic accident report could be automatically emailed to the DMV and also saved by the citizens for their records. A hard copy of the report could be printed by either DMV or CAR unit personnel, if necessary. Table 4.3 summarizes the advantages and disadvantages of system alternative #3.

Table 4.3: Advantages and disadvantages of alternative #3

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> • Data entered by citizens can be verified and validated. • Critical fields that help in decision making can be flagged (e.g., highlighted with color). • Availability of a GIS interface to describe accident. • Allows future growth. 	<ul style="list-style-type: none"> • Less difficult to develop and maintain than alternative #2. • Data entered by citizens cannot be saved until database is physically developed and implemented. • Less expensive upfront than alternative #2.

4.4 COSTS FOR EACH ALTERNATIVE

Table 4.4 shows preliminary costs that have been collected (mainly from private companies) for each alternative. The assumption made when reflecting these costs is that no resources (e.g., servers, labor, backup servers, etc.) currently exist at ODOT to support the development, implementation and maintenance of an online citizen crash reporting system. Cells shaded in grey color are not applicable.

Table 4.4: Preliminary Costs to Implement Alternative Systems

TYPE OF COST	COST BREAKDOWN	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
System Design Cost	Development of functional requirements	\$6,750 - \$16,830	\$18,750 - \$46,830	\$12,750 - \$28,830
	System Design Development	\$4,500 - \$11,220	\$12,500 - \$31,220	\$8,500 - \$19,220
Development 1	Number of pages in the form <ul style="list-style-type: none"> • 10 -15 pages 	\$3,000 – \$12,250	\$3,000 – \$12,250	\$3,000 – \$12,250
	Style of the pages <ul style="list-style-type: none"> • Simple yet attractive 	\$2,000 - \$3,000	\$2,000 - \$3,000	\$2,000 - \$3,000
	Flash or multimedia <ul style="list-style-type: none"> • Simple 	\$1,000 - \$2,000	\$1,000 - \$2,000	\$1,000 - \$2,000
	Database integration <ul style="list-style-type: none"> • Low to full development 		\$20,000 – \$50,000	\$10,000 - \$20,000
	Maintenance of the web form	\$ 262 – 525 per month	\$ 262 – 525 per month	\$ 262 – 525 per month
	Accident Drawing tool	\$ 3,125 – 5,400	\$ 3,125 – 5,400	\$ 3,125 – 5,400
	GIS Mapping Tool	\$ 2,125 – 5,400	\$ 2,125 – 5,400	\$ 2,125 – 5,400
Hardware acquisition costs	Servers operation cost			
	<ul style="list-style-type: none"> • Two UPS 		\$700 - \$1,338 each ²	
	<ul style="list-style-type: none"> • Diesel backup generator 		\$3,000 – \$10,000	
	Server machine cost		\$10,000 – \$14,000	
	Backup machine cost		\$4,000 – \$5,000	
Database related costs	Database design		\$25,000	\$25,000
	Database licensing		\$27,495 – \$200,000 ³	
	Database Reports		\$ 1,625 - \$ 2,000 per report	\$ 1,625 - \$ 2,000 per report

Note: Hardware and software maintenance costs are considered negligible

¹ <http://www.webpagefx.com/websitedesign.htm#calculator>

² <http://www.google.com/search?sourceid=chrome&ie=UTF-8&q=server+machine+UPS#q=server+UPS&hl=en&tbs=shop:1&ei=1agrTZW1CpG-sAO3krmRBw&start=0&sa=N&biw=1111&bih=554&fp=3892575de673670>.

³ <http://www.microsoft.com/sqlserver/2008/en/us/pricing.aspx>. Considering SQL Server Enterprise. This will depend on current ODOT capabilities and licensing as well as number of processors in the server machines.

5.0 ONLINE CITIZEN CRASH REPORTING SYSTEM WEB SITE

Although a complete implementation plan was not produced as part of this project, the basic requirements that an online citizen crash reporting system should meet were defined.

The requirements described in this section were defined assuming that alternative #2 would be selected by the DMV and the CAR Unit. Alternative #2 was assumed because it provides the necessary functionality in the short term, but it would also allow for future growth should the DMV and the CAR Unit decide to expand its basic functionality.

When defining requirements, the priority levels shown in Table 5.1 are used to state their importance.

Table 5.1: Priority scale used to define website requirements

PRIORITY LEVEL	DESCRIPTION	WORDING USED
Priority 1	This is an essential requirement.	The system MUST have...
Priority 2	This is a highly desirable functionality.	The system SHOULD have...
Priority 3	These are extra features that would be good to have.	The system COULD have

5.1 WEBSITE STRUCTURE

Figure 5.1 depicts the proposed structure of the online citizen crash reporting website. Figure 5.2 also depicts how the information entered by the user as the different pages of the website are presented.

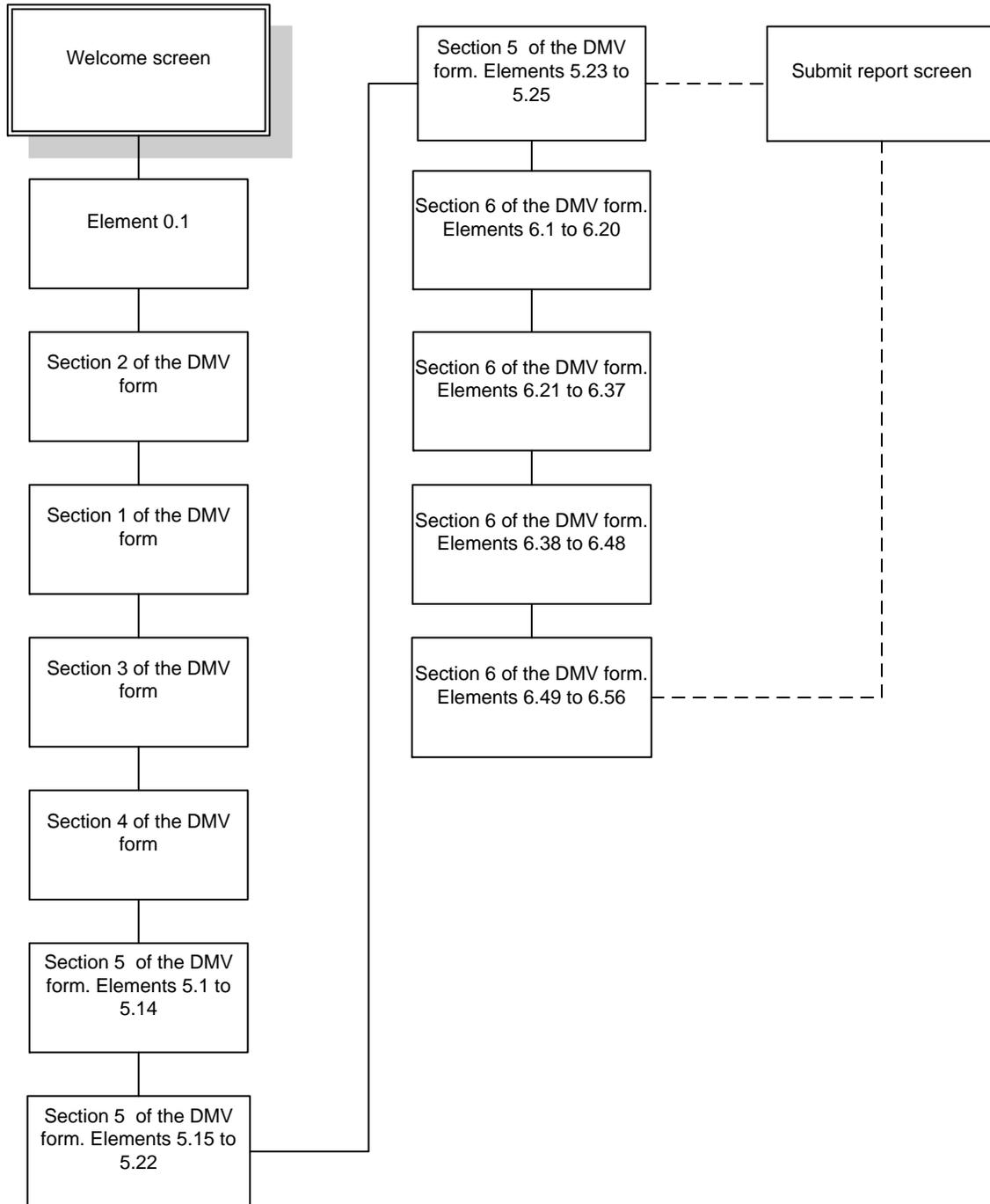


Figure 5.1: Website structure

Each box in the diagram represents an individual online form within the website. The individual elements that compose each form can be found in Appendix A. When elements 5.23 to 5.25 are reached, the user will be asked if the report is related to a motor carrier incident. If the user chooses “no,” then the form will go to the “submit report” screen where the form will be finalized and all the collected data will be processed and uploaded to the servers. If the user chooses “yes,” then the form will present the remainder of the boxes consisting of section 6 of the DMV report. When the user finishes this section, the form will go to the “submit report” screen.

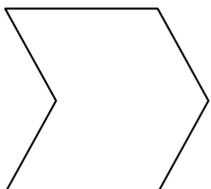
5.1.1 Data Flow

This section describes the data flow between the server and the client for each of the individual web pages shown in Figure 5.1. Since the client might be generating a document in XML format instead of storing the information in the database in real time, this section will only focus in sections where the client pulls data from the server.

5.1.1.1 Section 2 of the DMV report

Section 2 will use the information from the server shown in Table 5.2.

Table 5.2: Section 2 of the DMV data flow

SERVER		FORM ELEMENTS
SSN		2.01.1
Driver License		2.01.1
Driver’s Name		2.01.2
Driver’s Address		2.01.2
Driver’s sex		2.01.2
Driver’s DOB		2.01.2

5.1.1.2 Section 1 of the DMV report

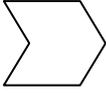
In the event that the information for the crash locator tool is pulled from an internal GIS system at ODOT, then section 1 will pull data from this GIS system. Table 5.3 shows the elements that will utilize such information.

Table 5.3: Section 1 of the DMV data flow

SERVER		FORM ELEMENTS
GIS information		1.5
Road names database		1.7

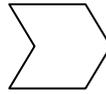
5.1.1.3 Section 4 of the DMV report

Table 5.4: Section 4 of the DMV data flow

SERVER		FORM ELEMENTS
Road names database		4.6
		4.7
		4.8

5.1.1.4 Section 6 of the DMV report

Table 5.5: Section 6 of the DMV data flow

SERVER		FORM ELEMENTS
Road names database		6.7

5.1.2 Crash Locator Tool

This is a tool similar to Google maps that allows the user to find the crash locator on a map. The objective of this tool is for the user to describe graphically where the accident occurred. For this purpose, the tool will have a connection to Google maps or any other GIS system. Figure 5.2 shows a conceptual model of the tool.

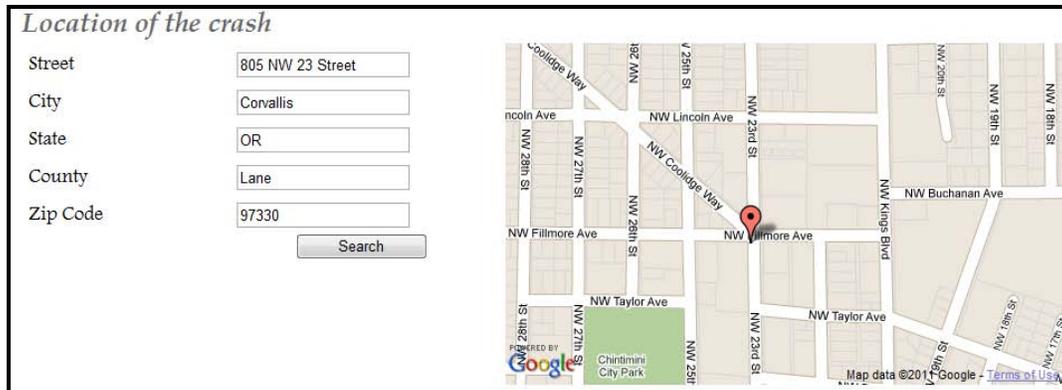


Figure 5.2: Crash locator concept

Requirements for the crash locator tool:

- The user must be able to drag the marker to the exact position of the crash (*Priority 1*).
- The system must save the map in the server as a “.gif” data file with the name “Unique_report_identifier- CLT.gif” (*Priority 1*).
- The tool should be able to calculate the distance between the marker and the nearest intersection and save this information in the server (*Priority 2*).
- The information concerning the latitude and longitude of the marker should be saved in the server (*Priority 2*).

The following use cases are proposed for this tool:

Table 5.6: Crash locator tool use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Text boxes	User fills each box.	When the first text box has text in it the second one will activate. When the previous box has text in it, the next one will be enabled. When the zip code text box has text in it, the <i>search</i> button will become enabled.
Search button	User finished filling the text boxes. User presses search map button.	The tool will create a search string for Google maps and the map will be displayed. The map should zoom in to the level before the street level.

5.1.3 Crash Drawing Tool

It is recommended that the tool designed by the company ClaimMS GmbH is used as the crash drawing tool. This is a free tool designed to draw a sketch of a car accident. It consists of a drag and drop interface where the user can select vehicles, roads, and traffic signs, and thus creates a detailed situation of the accident. Figure 5.3 shows the initial interface of the tool and Figure 5.4 shows an example of a sketch.



Figure 5.3: Accident sketch interface.



Figure 5.4: Accident sketch example.

This system is an excellent guideline to create a similar tool for an online citizen crash reporting system for Oregon. If possible, contact should be established with the company to explore the possibility of using the tool in the ODOT website. As with the crash locator tool, the following requirement is needed:

- The system must save the map as a gif data file in the server with the name “Unique_report_identifier-CDT.gif” (*Priority 1*).

5.1.4 Seat Locator Tool

This tool would allow the user to report information concerning the passengers in the vehicle (e.g., name, age, gender, etc.) Figure 5.5 shows a conceptual model of the tool.

Driver and passenger injury and safety equipment information

- Fill driver information up
- Hit submit
- Select another seat and repeat



Seat position Driver

Name

Sex M ▾

Age

Safety equipment No seat belt available ▾

Airbag Yes ▾

Injury Deceased as result of the accident ▾

Submit information for this passenger

Figure 5.5: Seat locator concept

The requirements for the seat locator tool are the following:

- After loading the tool, the user must only be allowed to select information about the driver (see green square on Figure 5.5) (*Priority 1*).
- Once the driver information is submitted the user must be allowed to select any other seat (*Priority 1*).

The use cases shown in Table 5.7 are proposed for the seat locator tool.

Table 5.7: Seat locator tool use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Car diagram	User clicks on a seat.	If the driver information has been submitted, the selected seat will become highlighted. If the user has not submitted information of the driver, no other seat but the driver's will become available.
Submit button	User hits the submit button.	The information for the current selected seat will be stored in the server.
Injury combo box	User selects option 5: no apparent injury.	Form will check if element 3.4 was checked. If this is the case a message will appear informing the user that he stated that someone was injured.
Alternative	User selects any option from 1 through 4.	Form will check if element 3.4 was checked. If it was not checked a message will appear informing the user that he stated that no one was injured.

5.1.5 Car Damage Tool

The objective of this tool is to allow the user to describe graphically the location of the damage on the vehicle. The first impact has to be shown with a marker, as depicted in Figure 5.6. The tool should allow the user to place the marker around the shape of the vehicle. The damaged area should be able to be shown by means of a modification of the vehicle picture via brushes like in the brush tool found in Microsoft's Paint program. An eraser tool would be used to remove the marker and brushes.

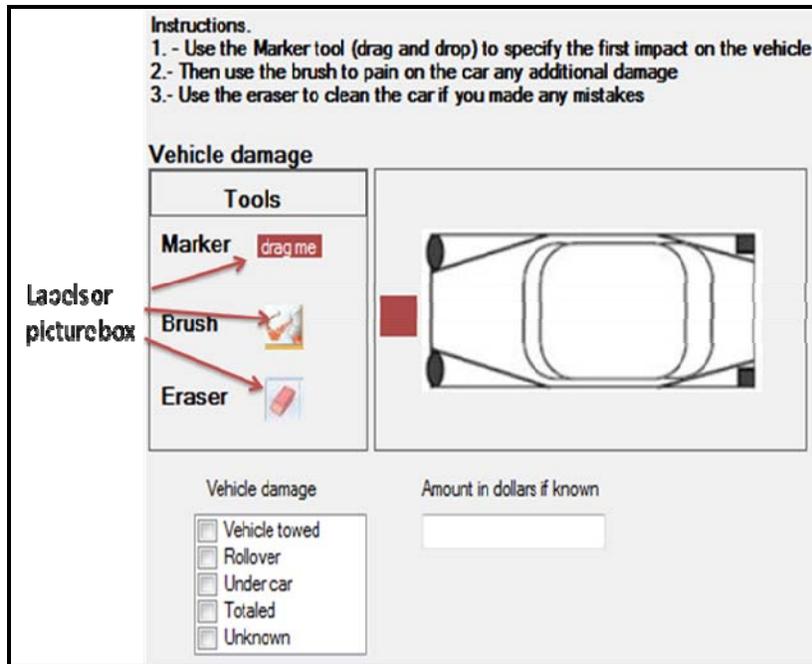


Figure 5.6: Damage locator tool

For the car damage tool the following requirement is needed:

- The final diagram must be saved with the following name: “Unique_report_identifier – DLT.gif” (Priority 1).

Table 5.8 shows the use cases for this tool.

Table 5.8: Use cases for the crash damage locator tool

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Marker	The user drags and drops the marker onto the sides of the car.	The pointer will change to the default one. A red marker will appear when it was dropped as seen in Figure 5.6. The marker image will become disabled.
Brush	The user clicks on the brush icon. The user clicks afterwards on the car bitmap.	The pointer will change to a brush-like pointer The places on the car where the user clicks will become painted like in MS Paint program.
Eraser	The user clicks on the eraser icon. The user clicks on either markers or spots that have been painted with the brush.	The markers or painted spots will be “cleaned”. If a marker was cleaned, the marker icon will become enabled if it was disabled.

5.2 GENERAL FUNCTIONAL REQUIREMENTS OF THE WEBSITE

- The website must support the most prevalent web browsers such as Internet Explorer, Mozilla Firefox, Google and Safari (*Priority 1*).
- The website must have an option for the user to save the session such as a login / password or email (*Priority 1*).
- The website should provide help to the user. This could be done by opening up a small window that mentions what is expected in each field of the web form (*Priority 2*).
- When the user starts a report, the system must automatically assign a *unique report identifier* to it (*Priority 1*) which should have the following structure:

“LastName-Last_four_digits_of_SSN– Current date”

5.3 SECURITY REQUIREMENTS

- The system must use a secure connection between the client and the server (*Priority 1*).
- The system must use Captcha codes when users are entering information in Element 2.01 (*Priority 1*).
- The system should log the client’s IP address and store this information in the server. (*Priority 2*)

5.4 XML DATA FILE

An XML file can be generated at the end of the session after the user submits the report. This XML file contains all the information of the report. The file name must follow this naming convention:

“Unique_report_identifier-Report.xml”

If no database is available, then this XML file will be stored for further processing such as assembling and printing a paper copy of the report in PDF format.

At the end of the session, the server should create a folder with the following name:

“Unique_report_identifier-Report”

There should be 1 of these folders per report created and all the files in Table 5.9 must be placed in there.

Table 5.9: Generated files per user

FILE NAME	DESCRIPTION
Unique_report_identifier-Report.xml	This is the XML file that holds all the information entered in the form by means of: text boxes, combo boxes, radio buttons, check box lists, and calendars
Unique_report_identifier – DLT.gif	This is the diagram that shows the damage on the car created by the damage locator tool.
Unique_report_identifier – CDT.gif	This is the drawing of the accident created by the crash diagram tool.
Unique_repor_tidentifier– CLT.gif	This is the file created by the map locator tool.

6.0 FINAL REMARKS

The implementation of an online citizen crash reporting system would translate into a number of potential benefits to DMV and the CAR Unit. These benefits may include the collection of more accurate, timely, uniform, and complete traffic accident (i.e., crash) data. Also, centralized storage of crash data reports submitted electronically by citizens would improve accessibility to traffic accident information. The location of the centralized storage of crash data reports should be determined in coordination with both DMV and the CAR Unit at a later date, outside the scope of this project.

The availability of an online tool to report traffic accident data would also benefit the public by eliminating the need to fill out a report by hand and delivering it (i.e., in person or by mail) to DMV. Additionally, a person reporting a traffic accident would receive immediate confirmation that their traffic accident data has been filed. They may also have the opportunity to print out a copy of the report for their personal records.

It is expected that the preliminary design work performed as part of this project will aid the DMV and the CAR Unit in the future development and implementation of an online citizen crash reporting system.

7.0 REFERENCES

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APPENDIX A:

**FIELD ELEMENTS OF AN ONLINE CITIZEN CRASH REPORTING
SYSTEM**

ADDITIONAL ELEMENTS AT THE BEGINNING OF THE ONLINE OTAI REPORT

ELEMENT 0.1: REPORTABLE/NON REPORTABLE CRITERIA

Instructions: Does any of these apply to you?

- More than \$1500 in damage to your vehicle
- More than \$1500 in damage to any one person's property other than a vehicle
- Any vehicle has more than \$1500 and any vehicle is towed from the scene as a result o damages
- Injury to any person (no matter how minor the injury)
- Death of any person

Figure 7. Element 0.1

Type of Field

Required.

Data Resources Needed

1. Database where the information will be uploaded.

Use Cases

Table 10. Element 0.1 use cases

ALTERNATIVES	STEPS	OUTCOME
Alternative 1	User selects any option and presses submit	The report will be marked as reportable.
Alternative 2	User does not select any option	The report will be marked as not reportable.

Result of Element

The following will take place when the user presses the *submit* button:

1. If the report is reportable, the system will inform the user that it is not required to report this accident. The user will be able to continue to the next section.
2. If the report is not reportable, the user will be informed that filling the report is not required.

SECTION 1 OF THE OTAI REPORT

SECTION 1	ACCIDENT DATE 1	DAY OF WEEK M T W TH F 2 S SN	TIME OF DAY 3 AM PM	COUNTY 4	DO NOT WRITE IN THIS SPACE	Accident Number _____	
	ROAD ON WHICH ACCIDENT OCCURRED (Name of street, road or route) 5				MILE POST 6	TYPE OF ACCIDENT - The accident involved one or more of the following: (Mark all that apply) <input type="checkbox"/> Two vehicles <input type="checkbox"/> ATV / Snowmobile <input type="checkbox"/> Parked vehicle <input type="checkbox"/> More than two vehicles <input type="checkbox"/> Motorcycle <input type="checkbox"/> Overturned vehicle <input type="checkbox"/> Fatality <input type="checkbox"/> Motorized Scooter <input type="checkbox"/> Animal <input type="checkbox"/> Bicycle <input type="checkbox"/> Personal (assisted) mobility device <input type="checkbox"/> Fixed object / property <input type="checkbox"/> Pedestrian <input type="checkbox"/> Train <input type="checkbox"/> Other _____	
	<input type="checkbox"/> WITHIN _____ FEET N S E W NAME OF NEAREST INTERSECTING ROAD <input type="checkbox"/> NEAR _____ MILES N S E W 7						
	<input type="checkbox"/> WITHIN _____ FEET N S E W NAME OF NEAREST CITY / TOWN <input type="checkbox"/> NEAR _____ MILES N S E W 8						
				9			

Figure 8. Section 1 of the OTAI Paper Form

ELEMENTS 1.1 AND 1.2: DATE AND DAY OF THE WEEK

OTAI Paper Form

ACCIDENT DATE	DAY OF WEEK M T W TH F S SN

Figure 9. Elements 1.1 and 1.2

Online OTAI Form Equivalent

Date Time Picker.

Accident date

Monday , October 11, 2010 ▼

Figure 10. Elements 1.1 and 1.2 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Error Handling and Constraints

This element will not let the user chose a future date or a date 50 years in the past.

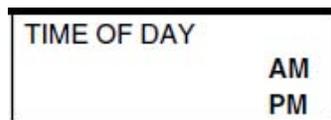
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored in the database.

ELEMENT 1.3: TIME OF THE DAY

OTAI Paper Form



A rectangular form with a black border. The text 'TIME OF DAY' is at the top left. To the right, 'AM' and 'PM' are stacked vertically.

Figure 11. Element 1.3 of the OTAI Paper Form

Online OTAI Form Equivalent

Textbox.



A light gray rectangular box with the text 'Accident time' at the top and a smaller white box containing '00:00' below it.

Figure 12. Element 1.3 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Error Handling and Validation Rules

1. The form will have data validation rules to allow only a 24 hour time format input. An error message will be displayed if there is any other format. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally, the button to go to the next page will become disabled.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 1.4: COUNTY

OTAI Paper Form



COUNTY

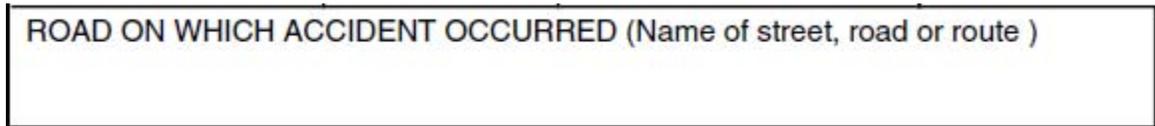
Figure 13. Element 1.4 of OTAI Paper Form

Online OTAI Form Equivalent

This element will be replaced by Element 1.5.

ELEMENT 1.5: ROAD ON WHICH ACCIDENT OCCURRED

OTAI Paper Form



ROAD ON WHICH ACCIDENT OCCURRED (Name of street, road or route)

Figure 14. Element 1.5 of the OTAI Paper Form

Online OTAI Form Equivalent

Online form with Google maps connection.

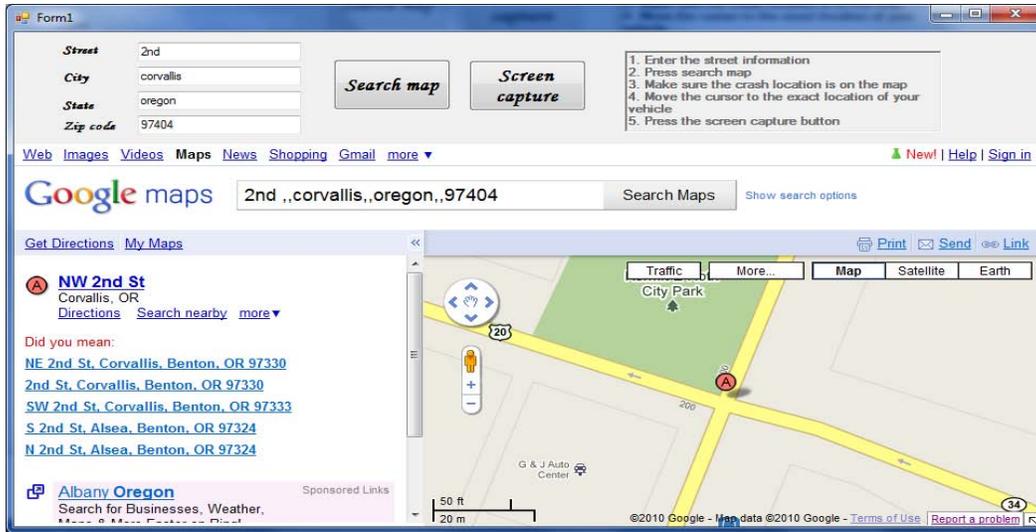


Figure 15. Element 1.5 Online OTAI Form Equivalent

Description

This tool will allow the user to describe graphically where the accident occurred. For this purpose, the tool will have a connection to Google maps. After the user locates the place of the accident, a screen shot will be taken by pressing the *screen capture* button. This screen shot will be sent to the database along the road data.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.
2. Google maps connection.

Initial state of the tool

- All text boxes except the first one must be disabled.
- The buttons must be disabled.
- No content should be showed in the web browser.

Use Cases

Table 11. Element 1.5 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Text boxes	User fills each box.	When the first text box has text in it the second textbox will be activated. When the previous box has text in it, the next one will be enabled. When the zip code text box has text in it, the search map button will become enabled.
Search map button	User finished filling the text boxes. User presses search map button.	The tool will create a search string for Google maps and the map will be displayed in an embedded web browser. The map should zoom in to the level before the street level. Once the search button map is pressed, the screen capture button will become enabled. The tool should be able to calculate the distance between the marker and the nearest intersection.
Screen capture button	User presses the screen capture button.	The tool will capture a screenshot of the map only and this information will be stored in the database.
Alternative	User presses the screen capture button an additional time.	The previous screen shot stored in the database will be replaced with the new screen shot.
Map interface	User grabs marker.	The user should be able to drag the marker to the exact position of the crash.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information of the text boxes as well as the screen shot will be stored in the database.

ELEMENT 1.6: MILE POST

OTAI Paper Form



MILE POST

Figure 16. Element 1.6 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



2

Figure 17. Element 1.6 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Error Handling and validation rules

1. The form will have data validation to only allow integers.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 1.7: NAME OF NEAREST INTERSECTION

OTAI Paper Form

<input type="checkbox"/> WITHIN _____ FEET N S E W NAME OF NEAREST INTERSECTING ROAD
<input type="checkbox"/> NEAR _____ MILES N S E W

Figure 18. Element 1.7 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box and combo boxes. Street combo box with auto completion.



Figure 19. Element 1.7 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the roads of the county selected in Element 1.4 of the online OTAI form. This information will be used to populate the combo box that displays the roads.
2. Database where the collected information will be uploaded.

Error Handling and Validation Rules

1. The form will use data validation to only allow integers in the text boxes.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 1.8: NAME OF NEAREST CITY / TOWN

OTAI Paper Form

<input type="checkbox"/> WITHIN _____ FEET N S E W NAME OF NEAREST CITY / TOWN
<input type="checkbox"/> NEAR _____ MILES N S E W

**Figure 20. Element 1.8 of the DMV for
*Online OTAI Form Equivalent***

Text box and combo boxes. City combo box with auto completion



Figure 21. Element 1.8 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the cities of the state. This information will be used to populate the combo box that displays the cities.
2. Database where the collected information will be uploaded.

Error Handling and Validation Rules

1. The form will use data validation to only allow integers in the text boxes.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 1.9: TYPE OF ACCIDENT

OTAI Paper Form

TYPE OF ACCIDENT - The accident involved one or more of the following: (Mark all that apply)		
<input type="checkbox"/> Two vehicles	<input type="checkbox"/> ATV / Snowmobile	<input type="checkbox"/> Parked vehicle
<input type="checkbox"/> More than two vehicles	<input type="checkbox"/> Motorcycle	<input type="checkbox"/> Overturned vehicle
<input type="checkbox"/> Fatality	<input type="checkbox"/> Motorized Scooter	<input type="checkbox"/> Animal
<input type="checkbox"/> Bicycle	<input type="checkbox"/> Personal (assisted) mobility device	<input type="checkbox"/> Fixed object / property
<input type="checkbox"/> Pedestrian	<input type="checkbox"/> Train	<input type="checkbox"/> Other _____

Figure 22. Element 1.9 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

<input type="checkbox"/> Two vehicles	<input type="checkbox"/> ATV / Snowmobile	<input type="checkbox"/> Parked vehicle
<input type="checkbox"/> More than two vehicles	<input type="checkbox"/> Motorcycle	<input type="checkbox"/> Overturned vehicle
<input type="checkbox"/> Fatality	<input type="checkbox"/> Motorized Scooter	<input type="checkbox"/> Animal
<input type="checkbox"/> Bicycle	<input type="checkbox"/> Personal (assisted) mobility device	<input type="checkbox"/> Fixed object / property
<input type="checkbox"/> Pedestrian	<input type="checkbox"/> Train	<input checked="" type="checkbox"/> Other

Please specify

Figure 23. Element 1.9 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

SECTION 2 OF THE OTAI PAPER FORM

Complete ALL of this section. If you fail to do so, your driving privileges may be suspended. You **MUST** list the insurance company (not agency) and policy number that provided liability coverage for the vehicle you were driving.

SECTION 2 (YOUR VEHICLE # 1)	DRIVER'S NAME (LAST, FIRST, MIDDLE) 1		DRIVER'S LICENSE NUMBER 2		STATE 3	DATE OF BIRTH 4	SEX 5
	DRIVER'S RESIDENCE ADDRESS 6		CITY		STATE	ZIP CODE	<input type="checkbox"/> CHECK BOX IF ADDRESS CHANGE
	MAILING ADDRESS (IF DIFFERENT THAN RESIDENCE) 7		CITY		STATE	ZIP CODE	
	VEHICLE OWNER'S NAME AND ADDRESS 8		CITY		STATE	ZIP CODE	
	<input type="checkbox"/> SAME						
	INSURANCE COMPANY NAME (NOT AGENCY) AND ADDRESS 9		CITY		STATE	ZIP CODE	
POLICY NUMBER 10	VEHICLE IDENTIFICATION NUMBER 11		VEHICLE PLATE NUMBER 12	STATE 13	YEAR 14	MAKE & MODEL 15	

Figure 24. Section 2 of the OTAI Report

ELEMENT 2.01: ADDITIONAL ELEMENT FOR SECTION 2, DRIVER'S LICENSE NUMBER

Please enter your driver license number

Figure 25. Element 2.01.1

Type of Field

Required.

Data Resources Needed

1. Database containing information about the drivers.

After the user has entered a valid driver license number, the online OTAI system will connect to the driver license database and will pull the following information and display it. The text boxes will be read only.

Figure 26. Element 2.01

Use Cases

Table 12: Element 2.01.2 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Combo box <i>Is this you?</i>	User selects the <i>Yes</i> option for the first time.	Address combo box will become enabled.
Alternative 1	User selects the <i>No</i> option	Form will go back to Element 2.01.1 to allow the user to revise the driver license number.
Alternative 2	User selects the <i>Yes</i> option for the second time.	A message will appear asking the user to call ODOT. A phone number should be provided.
Combo box <i>Is your address correct?</i>	User selects the <i>Yes</i> option.	Vehicle owner combo box will become enabled. Element 2.6 will contain the address from Element 2.01.1
Alternative 1	User selects the <i>No</i> option.	Elements 2.6 and 2.7 will be enabled for the user to fill. Afterwards the form will return to Element 2.01.2
Combo box <i>Are you the vehicle's owner?</i>	User selects the <i>Yes</i> option.	Element 2.8 will contain the same address from Element 2.01.2.
Alternative 1	User selects the <i>No</i> option.	Form will show Element 2.8 for the user to fill.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Elements 2.3, 2.4 and 2.5 will be obtained from the drivers' database.
2. The information will be stored into the database.

ELEMENT 2.1: DRIVER'S NAME

OTAI Paper Form

DRIVER'S NAME (LAST, FIRST, MIDDLE)

Figure 27. Element 2.1 of the OTAI Paper Form

Online OTAI Form Equivalent

This element will be replaced by Element 2.01.2.

ELEMENT 2.2: DRIVER'S LICENSE NUMBER

OTAI Paper Form

DRIVER'S LICENSE NUMBER

Figure 28. Element 2.2 of the OTAI Paper Form

Online OTAI Form Equivalent

This element will be replaced by element 2.01.

ELEMENTS 2.3, 2.4 AND 2.5: STATE, DOB AND SEX

OTAI Paper Form

STATE	DATE OF BIRTH	SEX
-------	---------------	-----

Figure 29. Elements 2.3, 2.4 and 2.5 of the OTAI Paper Form

Online OTAI Form Equivalent.

This element will be replaced by Element 2.01.2.

Data Resources Needed

1. Driver's database. This information will be used to populate the state, date of birth and sex in the report.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The required information from the drivers' database will be used for the report's database.

ELEMENT 2.6: DRIVER'S RESIDENCE ADDRESS

OTAI Paper Form

DRIVER'S RESIDENCE ADDRESS	CITY	STATE	ZIP CODE	<input type="checkbox"/> CHECK BOX IF ADDRESS CHANGE
----------------------------	------	-------	----------	--

Figure 30. Element 2.6 of the OTAI Paper Form

Online OTAI Form Equivalent

This element will be replaced by Element 2.01.2.

ELEMENT 2.7: MAILING ADDRESS (IF DIFFERENT THAN RESIDENCE)

OTAI Paper Form

MAILING ADDRESS (IF DIFFERENT THAN RESIDENCE)	CITY	STATE	ZIP CODE
---	------	-------	----------

Figure 31. Element 2.7 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box with auto completion, combo box, combo box, text box.

The screenshot shows a form with five input fields: a text box containing '121', a text box containing 'Norman', a dropdown menu with 'Or' and a downward arrow, a dropdown menu with 'Corvallis' and a downward arrow, and a text box containing '87778'. Below each field is a label: 'Number', 'Street name', 'State', 'City', and 'Zip code' respectively.

Figure 32. Element 2.7 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 2.8: VEHICLE OWNER’S NAME AND ADDRESS

OTAI Paper Form

VEHICLE OWNER'S NAME AND ADDRESS	CITY	STATE	ZIP CODE
<input type="checkbox"/> SAME			

Figure 33. Element 2.8 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box with auto completion, Combo box, Combo box, text box.

<input type="text"/>	<input type="text"/>	Or	<input type="text" value="Corvallis"/>	<input type="text"/>
Number	Street name	State	City	Zip code
<input type="checkbox"/> Same as driver				

Figure 34. Element 2.8 Online OTAI Form Equivalent

Use Cases

Table 13: Element 2.8 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
<i>Same as driver</i> checked list box	User checks the box.	Element 2.8 will have the same information as Element 2.6

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 2.9: INSURANCE COMPANY NAME AND ADDRESS

OTAI Paper Form

INSURANCE COMPANY NAME (NOT AGENCY) AND ADDRESS	CITY	STATE	ZIP CODE
---	------	-------	----------

Figure 35. Element 2.9 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box, textbox, textbox with auto completion, combo box, combo box, text box.

Farmers	442	23	Or	Corvallis	3322
Insurance name	Number	Street name	State	City	Zip code

Figure 36. Element 2.9 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 2.10: POLICY NUMBER

OTAI Paper Form



POLICY NUMBER

Figure 37. Element 2.10 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



122331

Figure 38. Element 2.10 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

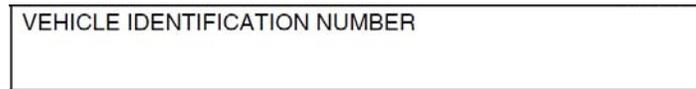
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 2.11: VEHICLE IDENTIFICATION NUMBER

OTAI Paper Form



VEHICLE IDENTIFICATION NUMBER

Figure 39. Element 2.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



3453

Figure 40. Element 2.11 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 2.12: VEHICLE PLATE NUMBER

OTAI Paper Form



VEHICLE PLATE NUMBER

Figure 41. Element 2.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



PWN123

Figure 42. Element 2.11 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 2.13, 2.14 AND 2.15: STATE, YEAR, MAKE AND MODEL

OTAI Paper Form

STATE	YEAR	MAKE & MODEL
-------	------	--------------

Figure 43. Elements 2.13, 2.14 and 2.15 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, text box, text box, text box.

Or ▾	1990	Ford	F150
State	Year	Make	Model

Figure 44. Elements 2.13, 2.14 and 2.15 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

SECTION 3 OF THE OTAI PAPER FORM

SECTION 3	Check all statements that apply:	1 <input type="checkbox"/> Damage to your vehicle was more than \$1500.			
	2 <input type="checkbox"/> Damage to any one person's property (other than vehicle) was more than \$1500.				
	3 <input type="checkbox"/> Your vehicle was towed from the scene as a result of damages.				
	4 <input type="checkbox"/> You or passengers in your vehicle were injured.				
	5 <input type="checkbox"/> The accident occurred while you were driving your employer's vehicle.				
	6 <input type="checkbox"/> You were driving on your job and being paid for the principal purpose of driving.				
	7 <input type="checkbox"/> You were being paid to drive and/or deliver persons or property.				
	8 <input type="checkbox"/> You were operating a government owned vehicle marked for transporting mail in accordance with government rules.				
	9 <input type="checkbox"/> You were operating an authorized emergency vehicle.				
	10 <input type="checkbox"/> You were operating a commercial motor vehicle requiring you to have a commercial driver license.				
	11 <input type="checkbox"/> You were transporting hazardous material.				
	12 <input type="checkbox"/> A police officer came to the scene.	Name of police department: _____	12.1 <input type="checkbox"/> City	12.2 <input type="checkbox"/> County	12.3 <input type="checkbox"/> State Police
	13 <input type="checkbox"/> A citation was issued to you.	The citation was: _____			

ELEMENTS 3.1 TO 3.4

OTAI Paper Form

- Damage to your vehicle was more than \$1500.
- Damage to any one person's property (other than vehicle) was more than \$1500.
- Your vehicle was towed from the scene as a result of damages.
- You or passengers in your vehicle were injured.

Figure 45. Elements 3.1 to 3.4 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes within a panel.

- Damage to your vehicle was more than \$1500
- Damage to any one person's property (other than vehicle) was more than \$1500
- Your vehicle was towed from the scene as a result of damages
- You or passengers in your vehicle were injured

Figure 46. Elements 3.1 to 3.4 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Use Cases

Table 14: Elements 3.1 to 2.4 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User does not select any of these options.	A green label will appear with the text: <i>You don't need to fill a report, you can exit this website.</i>
Alternative	User selects at least an option	A red label will appear with the text: <i>By law you have to complete this report.</i>

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 3.5 TO 3.11

OTAI Paper Form

- The accident occurred while you were driving your employer's vehicle.
- You were driving on your job and being paid for the principal purpose of driving.
- You were being paid to drive and/or deliver persons or property.
- You were operating a government owned vehicle marked for transporting mail in accordance with government rules.
- You were operating an authorized emergency vehicle.
- You were operating a commercial motor vehicle requiring you to have a commercial driver license.
 - You were transporting hazardous material.

Figure 47. Elements 3.5 to 3.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

<input type="checkbox"/>	The accident occurred while you were driving your employer's vehicle
<input type="checkbox"/>	You were driving on your job and being paid for the principal purpose of driving
<input type="checkbox"/>	You were being paid to drive and or deliver persons or property
<input type="checkbox"/>	You were operating a government owned vehicle marked for transporting mail in accordance with government rules
<input type="checkbox"/>	You were operating an authorized emergency vehicle
<input type="checkbox"/>	You were operating a commercial motor vehicle requiring you to have a commercial driver license
<input type="checkbox"/>	You were transporting hazardous material

Figure 48. Elements 3.5 to 3.11 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 3.12

OTAI Paper Form

A police officer came to the scene.
 Name of police department: _____ City County State Police

Figure 49. Element 3.12 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box, text box, checked list boxes.

<input checked="" type="checkbox"/> A police officer came to the scene	<input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State police
Name of the police department <input type="text"/>	

Figure 50. Element 3.12 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 3.13

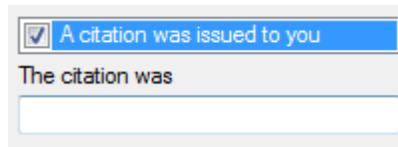
OTAI Paper Form

A citation was issued to you.
The citation was: _____

Figure 51. Element 3.13 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box and text box.



The screenshot shows a web form with a checked list box containing the text "A citation was issued to you" and a text box below it with the label "The citation was".

Figure 52. Element 3.13 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

SECTION 4 OF THE OTAI PAPER FORM

SECTION 4. (OTHER VEHICLE #2)	DRIVER'S NAME (LAST, FIRST, MIDDLE) 1		DRIVER'S LICENSE NUMBER 2	STATE 3	DATE OF BIRTH 4	SEX 5	
	DRIVER'S ADDRESS 6		CITY	STATE	ZIP CODE		
	VEHICLE OWNER'S NAME AND ADDRESS 7		CITY	STATE	ZIP CODE		
	<input type="checkbox"/> SAME						
	INSURANCE COMPANY NAME (NOT AGENT) AND ADDRESS 8						
POLICY NUMBER 9	VEHICLE IDENTIFICATION NUMBER 10		VEHICLE PLATE NUMBER 11	STATE 12	YEAR 13	MAKE & MODEL 14	

Figure 53. Section 4 of the OTAI Paper Form

ELEMENT 4.1: DRIVER'S NAME

OTAI Paper Form

DRIVER'S NAME (LAST, FIRST, MIDDLE)

Figure 54. Element 4.1 of the OTAI Paper Form

Online OTAI Form Equivalent.

Text boxes.

Last	First	Middle

Figure 55. Element 4.1 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.2: DRIVER'S LICENSE NUMBER

OTAI Paper Form

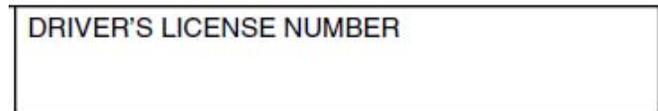


Figure 56. Element 4.2 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

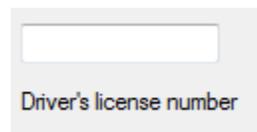


Figure 57. Element 4.2 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 4.3, 4.4 AND 4.5: STATE DOB AND SEX

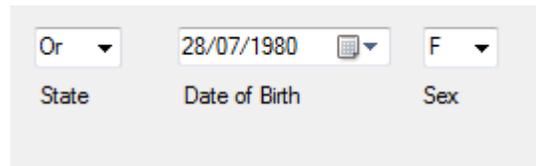
OTAI Paper Form

STATE	DATE OF BIRTH	SEX
-------	---------------	-----

Figure 58. Elements 4.3, 4.4 and 4.5 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, date time picker, combo box.



Or 28/07/1980 F
State Date of Birth Sex

Figure 59. Elements 4.3, 4.4 and 4.5 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.6: DRIVER'S ADDRESS

OTAI Paper Form

DRIVER'S ADDRESS	CITY	STATE	ZIP CODE
------------------	------	-------	----------

Figure 60. Element 4.6 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box with auto completion, Combo box, Combo box, Text box.

The screenshot shows a form with five input fields: a text box containing '121', a text box containing 'Norman', a dropdown menu with 'Or' and a downward arrow, a dropdown menu with 'Corvallis' and a downward arrow, and a text box containing '87778'. Below each field is a label: 'Number', 'Street name', 'State', 'City', and 'Zip code' respectively.

Figure 61. Element 4.6 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.7: VEHICLE OWNER'S NAME AND ADDRESS

OTAI Paper Form

VEHICLE OWNER'S NAME AND ADDRESS	CITY	STATE	ZIP CODE
<input type="checkbox"/> SAME			

Figure 62. Element 4.7 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box, text box with auto completion, Combo box, Combo box, text box.

<input checked="" type="checkbox"/> Same	<input type="text"/>	<input type="text"/>	Or ▼	Corvallis ▼	<input type="text"/>
Same	Number	Street name	State	City	Zip code

Figure 63. Element 4.7 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.8: INSURANCE COMPANY NAME AND ADDRESS

OTAI Paper Form

INSURANCE COMPANY NAME (NOT AGENT) AND ADDRESS
--

Figure 64. Element 4.8 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box, textbox, textbox with auto completion, combo box, combo box, text box.

<input type="text" value="Farmers"/>	<input type="text" value="442"/>	<input type="text" value="23"/>	Or ▾	<input type="text" value="Corvallis"/>	<input type="text" value="3322"/>
Insurance name	Number	Street name	State	City	Zip code

Figure 65. Element 4.8 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country and the cities of the state. This information will be used to populate the state and city combo boxes.
2. Database where the collected information will be uploaded.

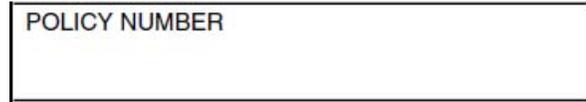
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.9: POLICY NUMBER

OTAI Paper Form



POLICY NUMBER

Figure 66. Element 4.9 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



122331

Figure 67. Element 4.9 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.10: VEHICLE IDENTIFICATION NUMBER

OTAI Paper Form

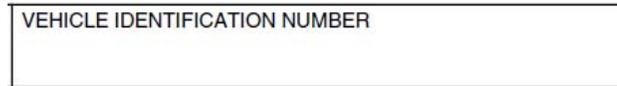


Figure 68. Element 4.10 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Figure 69. Element 4.10 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 4.11: VEHICLE PLATE NUMBER

OTAI Paper Form

VEHICLE PLATE NUMBER

Figure 70. Element 4.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

PWN123

Figure 71. Element 4.11 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 4.12, 4.13 AND 4.14: STATE, YEAR MAKE AND MODEL

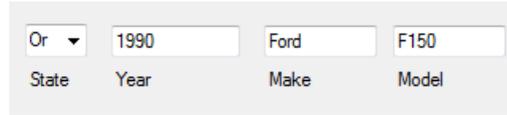
OTAI Paper Form

STATE	YEAR	MAKE & MODEL
-------	------	--------------

Figure 72. Elements 4.12, 4.13 and 4.14 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, text box, text box, text box.



Or ▾	1990	Ford	F150
State	Year	Make	Model

Figure 73. Elements 4.12, 4.13 and 4.14 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

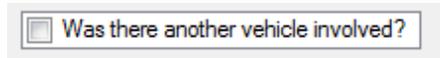
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

WAS THERE ANOTHER VEHICLE INVOLVED?

If the following checked list box is checked, then another form to enter a vehicle's information should open.



Was there another vehicle involved?

Figure 74. Additional element for section 4 of the OTAI Paper Form

SECTION 5 OF THE OTAI PAPER FORM

SECTION 5	DESCRIBE WHAT HAPPENED: 1
I certify all information given on this report is true and accurate to the best of my knowledge. 2	
SIGNATURE OF PERSON MAKING REPORT X	PRINTED NAME OF PERSON MAKING REPORT 3
DAYTIME PHONE # () 4	DATE SIGNED 5

YOU INTENDED TO...	YOUR VEHICLE	WEATHER CONDITIONS	YOUR RESIDENCE								
<input type="checkbox"/> Go straight ahead <input type="checkbox"/> Make right turn <input type="checkbox"/> Make left turn 6 <input type="checkbox"/> Make "U" turn <input type="checkbox"/> Back-Up <input type="checkbox"/> Enter driveway (also mark left or right turn) <input type="checkbox"/> Remain stopped in traffic <input type="checkbox"/> Enter parked position <input type="checkbox"/> Slow or Stop <input type="checkbox"/> Leave driveway (also mark left or right turn) <input type="checkbox"/> Start in traffic lane <input type="checkbox"/> Leave parked position <input type="checkbox"/> Remain parked <input type="checkbox"/> Overtake and pass	<input type="checkbox"/> Passenger car, pickup, van <input type="checkbox"/> Military vehicle <input type="checkbox"/> Taxicab 7 <input type="checkbox"/> Emergency vehicle <input type="checkbox"/> Any of the above and trailer <input type="checkbox"/> Private or public agency transit vehicle <input type="checkbox"/> Bus <input type="checkbox"/> School bus <input type="checkbox"/> Other publicly-owned veh. <input type="checkbox"/> Motorcycle <input type="checkbox"/> Motor-scooter/bike <input type="checkbox"/> Personal (assisted) mobility device <input type="checkbox"/> Truck tractor & semi trailer <input type="checkbox"/> Truck/truck tractor <input type="checkbox"/> Other truck combination <input type="checkbox"/> Farm tractor/farm equip.	<input type="checkbox"/> Clear <input type="checkbox"/> Raining <input type="checkbox"/> Snowing 8 <input type="checkbox"/> Fog <input type="checkbox"/> Other <tr style="background-color: black; color: white;"> <th colspan="2" style="text-align: center;">ROAD SURFACE</th> </tr> <input type="checkbox"/> Dry <input type="checkbox"/> Wet 9 <input type="checkbox"/> Snowy <input type="checkbox"/> Icy <input type="checkbox"/> Other <tr style="background-color: black; color: white;"> <th colspan="2" style="text-align: center;">LIGHT CONDITIONS</th> </tr> <input type="checkbox"/> Daylight <input type="checkbox"/> Dawn or dusk 10 <input type="checkbox"/> Darkness (lighted) <input type="checkbox"/> Darkness (unlighted) <input type="checkbox"/> Other	ROAD SURFACE		LIGHT CONDITIONS		<input type="checkbox"/> Local resident <small>(within 25 miles of accident site)</small> <input type="checkbox"/> Residing elsewhere in state <input type="checkbox"/> Non-resident of this state: <input type="checkbox"/> College student <input type="checkbox"/> Military 11 <input type="checkbox"/> Temporary job <tr style="background-color: black; color: white;"> <th colspan="2" style="text-align: center;">YOU WERE HEADED</th> </tr> <input type="checkbox"/> North <input type="checkbox"/> East <input type="checkbox"/> South <input type="checkbox"/> West 12 On: _____ <small>(name of street, road or route)</small> <tr style="background-color: black; color: white;"> <th colspan="2" style="text-align: center;">OTHER DRIVER WAS HEADED</th> </tr> <input type="checkbox"/> North <input type="checkbox"/> East <input type="checkbox"/> South <input type="checkbox"/> West 13 On: _____ <small>(name of street, road or route)</small>	YOU WERE HEADED		OTHER DRIVER WAS HEADED	
ROAD SURFACE											
LIGHT CONDITIONS											
YOU WERE HEADED											
OTHER DRIVER WAS HEADED											

WITNESS INFORMATION: 14

Figure 75. Section 5 of the OTAI Paper Form

DRIVER AND PASSENGER INJURY AND SAFETY EQUIPMENT INFORMATION

SAFETY EQUIPMENT CODES
WRITE one of the codes (0–10) in column C

- 0 No seat belt available
- 1 Seat belt available but NOT used
- 2 Seat belt available and in use
- 3 Child restraint device available
- 4 Child restraint device in use
- 5 Child restraint device not available
- 6 Helmet NOT in use
- 7 Helmet in use
- 8 Air bag deployed
- 9 Air bag available - NOT deployed
- 10 Air bag NOT available

INJURY CODE FOR OCCUPANTS
WRITE one of the codes (1–5) in column D

- 1 Deceased as a result of the accident
- 2 Incapacitated - unconscious, could not walk, broken or distorted limbs, etc.
- 3 Visible injury - lump, abrasion cuts
- 4 Momentary unconsciousness, complaint of pain, nausea, limping
- 5 No apparent injury

SEAT POSITION	PASSENGER'S NAMES (your vehicle)	A	B	C		D
		SEX	AGE	SFTY EOP	AIR BAG	INJURY
DRIVER						
FRONT CENTER	15					
FRONT RIGHT						
MIDDLE * LEFT						
MIDDLE * CENTER						
MIDDLE * RIGHT						
REAR LEFT						
REAR CENTER						
REAR RIGHT						

* Use **only** for vehicles with middle row of seats (i.e., vans, SUVs, etc.)

Figure 69. Section 5 of the OTAI Paper Form (cont.)

If this accident involved a pedestrian or bicyclist, complete the following:

PEDESTRIAN NAME BICYCLIST NAME

16

Pedestrian or bicyclist was going:
 N S E W ¹⁷

ALONG OR ACROSS: (name of street, road or route)
18

From:
19

To:

EXAMPLE: (From: NE corner To: SE corner (or) From: East side To: West side, etc.)

Sex and age of pedestrian / bicyclist:
 Male Female Age: _____ 20

Extent of pedestrian / bicyclist injury:
 Deceased Momentary unconscious-
 Incapacitated 21 ness /complaint of pain
 Visible injury No apparent injury

Pedestrian / bicyclist action: (mark one)
 Crossing at intersection or crosswalk
 Crossing **not** at intersection or crosswalk
 Walking / riding in roadway with traffic
 Walking / riding in roadway **against** traffic
 Standing in roadway 22
 Pushing or working on vehicles in roadway
 Other working in road
 Playing in road
 Hitchhiking
 Not in roadway
 Other _____
(specify)

Figure 69. Section 5 of the OTAI Paper Form (cont.)

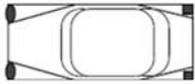
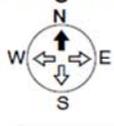
<p>Vehicle Damage</p> <p style="text-align: center;">FRONT</p>  <p>23 USE ARROW TO SHOW FIRST IMPACT (SHADE IN DAMAGED AREA)</p> <p><input type="checkbox"/> Vehicle towed <input type="checkbox"/> Rollover <input type="checkbox"/> Under car <input type="checkbox"/> Totaled <input type="checkbox"/> Unknown</p> <p>Your Vehicle (No. 1) damage: \$ _____ .</p>	<p>Diagram</p>  <p>Number each vehicle:  </p> <p>Show path by: </p> <p>Show pedestrian/bicyclist by: </p> <p>Show railroad tracks by: </p> <p style="text-align: center;">24</p> <p>_____ <small>(name of street, road or route)</small></p> <p>_____ <small>(name of street, road or route)</small></p>	<p style="text-align: center;">← ----- <small>(name of street, road or route)</small></p>
--	--	---

Figure 69. Section 5 of the OTAI Paper Form (cont.)

ELEMENT 5.1: DESCRIBE WHAT HAPPENED

OTAI Paper Form

DESCRIBE WHAT HAPPENED:

Figure 76. Element 5.1 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

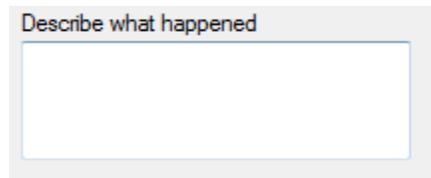
A screenshot of a web form element. It features a light gray rectangular container. At the top left of the container, the text "Describe what happened" is displayed in a small, dark font. Below this text is a large, empty white rectangular area with a thin blue border, intended for user input.

Figure 77. Element 5.1 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.2: I CERTIFY THAT ALL INFORMATION GIVEN ON THIS REPORT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

OTAI Paper Form

I certify all information given on this report is true and accurate to the best of my knowledge.

SIGNATURE OF PERSON MAKING REPORT
X

Figure 78. Element 5.2 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.

I certify all information given on this report is true and accurate to the best of my knowledge

Figure 79. Element 5.2 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.3: PRINTED NAME OF PERSON MAKING REPORT

OTAI Paper Form

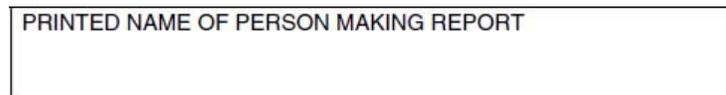


Figure 80. Element 5.3 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.

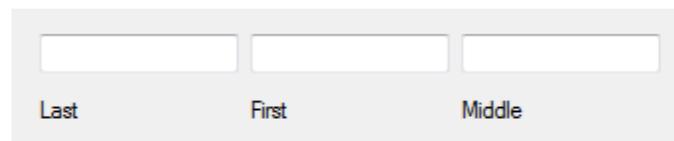


Figure 81. Element 5.3 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

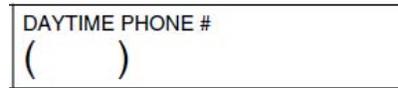
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.4: DAY TIME PHONE

OTAI Paper Form

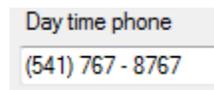


A rectangular text box with a thin black border. Inside the box, the text "DAYTIME PHONE #" is at the top. Below it, there are two pairs of parentheses, each with a space inside, representing a phone number format: "() ()".

Figure 82. Element 5.4 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



A light gray rounded rectangular box. At the top, the text "Day time phone" is displayed. Below it, a white text input field contains the phone number "(541) 767 - 8767".

Figure 83. Element 5.4 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 5.5: DATE SIGNED

OTAI Paper Form



Figure 84. Element 5.5 of the OTAI Paper Form

Online OTAI Form Equivalent

No element will be shown, instead the system will automatically get the current system date and this data will be uploaded into the database.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.6: YOU INTENDED TO...

OTAI Paper Form

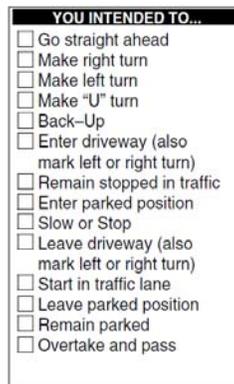


Figure 85. Element 5.6 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

The screenshot shows a form titled "You intended to..." with a list of 15 driving actions. Each action has a small square checkbox to its left, and all 15 checkboxes are filled with a grey color, indicating they are all selected. The actions listed are: Go straight ahead, Make right turn, Make left turn, Make "U" turn, Back-Up, Enter driveway (also make left or right turn), Remain stopped in traffic, Enter parked position, Slow or stop, Leave driveway (also make left or right turn), Start in traffic lane, Leave parked position, Remain parked, and Overtake and pass.

Figure 86. Element 5.6 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.7: YOUR VEHICLE

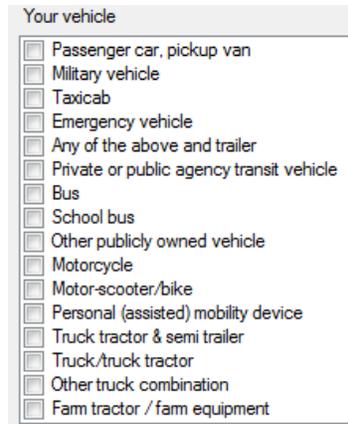
OTAI Paper Form

The screenshot shows a form titled "YOUR VEHICLE" with a list of 16 vehicle types. Each type has a small square checkbox to its left, and all 16 checkboxes are empty, indicating they are all unselected. The vehicle types listed are: Passenger car, pickup, van; Military vehicle; Taxicab; Emergency vehicle; Any of the above and trailer; Private or public agency transit vehicle; Bus; School bus; Other publicly-owned veh.; Motorcycle; Motor-scooter/bike; Personal (assisted) mobility device; Truck tractor & semi trailer; Truck/truck tractor; Other truck combination; and Farm tractor/farm equip.

Figure 87. Element 5.7 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.



The image shows a screenshot of a web form titled "Your vehicle". It contains a list of 16 vehicle types, each with an unchecked checkbox to its left. The list items are: Passenger car, pickup van; Military vehicle; Taxicab; Emergency vehicle; Any of the above and trailer; Private or public agency transit vehicle; Bus; School bus; Other publicly owned vehicle; Motorcycle; Motor-scooter/bike; Personal (assisted) mobility device; Truck tractor & semi trailer; Truck/truck tractor; Other truck combination; and Farm tractor / farm equipment.

Figure 88. Element 5.7 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

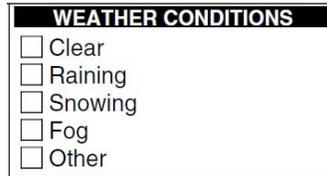
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.8: WEATHER CONDITIONS

OTAI Paper Form



WEATHER CONDITIONS
<input type="checkbox"/> Clear
<input type="checkbox"/> Raining
<input type="checkbox"/> Snowing
<input type="checkbox"/> Fog
<input type="checkbox"/> Other

Figure 89. Element 5.8 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.



Weather conditions
<input checked="" type="checkbox"/> Clear
<input checked="" type="checkbox"/> Raining
<input checked="" type="checkbox"/> Snowing
<input checked="" type="checkbox"/> Fog
<input checked="" type="checkbox"/> Other

Figure 90. Element 5.8 Online OTAI Form Equivalent

Use Cases

Table 15: Element 5.8 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects any option.	All other options will become disabled until the user deselects the selected option.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.9: ROAD SURFACE

OTAI Paper Form

ROAD SURFACE	
<input type="checkbox"/>	Dry
<input type="checkbox"/>	Wet
<input type="checkbox"/>	Snowy
<input type="checkbox"/>	Icy
<input type="checkbox"/>	Other

Figure 91. Element 5.9 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

Road conditions	
<input type="checkbox"/>	Dry
<input type="checkbox"/>	Wet
<input type="checkbox"/>	Snowy
<input type="checkbox"/>	Icy
<input type="checkbox"/>	Other

Figure 92. Element 5.9 Online OTAI Form Equivalent

Use Cases

Table 16: Element 5.9 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects any option.	All other options will become disabled until the user deselects the selected option.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.10: LIGHT CONDITIONS

OTAI Paper Form

LIGHT CONDITIONS
<input type="checkbox"/> Daylight
<input type="checkbox"/> Dawn or dusk
<input type="checkbox"/> Darkness (lighted)
<input type="checkbox"/> Darkness (unlighted)
<input type="checkbox"/> Other

Figure 93. Element 5.10 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

Light conditions

<input type="checkbox"/> Daylight
<input type="checkbox"/> Dawn or dusk
<input type="checkbox"/> Darkness (lighted)
<input type="checkbox"/> Darkness (Unlighted)
<input type="checkbox"/> Other

Figure 94. Element 5.10 Online OTAI Form Equivalent

Use Cases

Table 17: Element 5.10 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects any option.	All other options will become disabled until the user deselects the selected option.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.11: YOUR RESIDENCE

OTAI Paper Form

YOUR RESIDENCE	
<input type="checkbox"/>	Local resident (within 25 miles of accident site)
<input type="checkbox"/>	Residing elsewhere in state
<input type="checkbox"/>	Non-resident of this state:
<input type="checkbox"/>	College student
<input type="checkbox"/>	Military
<input type="checkbox"/>	Temporary job

Figure 95. Element 5.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list boxes.

Your residence	
<input checked="" type="checkbox"/>	Local resident (within 25 miles of accident)
<input type="checkbox"/>	Residing elsewhere in state
<input type="checkbox"/>	Non-resident of this state:
<input type="checkbox"/>	College student
<input type="checkbox"/>	Military
<input type="checkbox"/>	Temporary job

Figure 96. Element 5.11 Online OTAI Form Equivalent

Use Cases

Table 18: Element 5.11 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects any option.	All other options will become disabled until the user deselects the selected option.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.12: YOU WERE HEADED

OTAI Paper Form



YOU WERE HEADED	
<input type="checkbox"/> North	<input type="checkbox"/> East
<input type="checkbox"/> South	<input type="checkbox"/> West
On: _____ (name of street, road or route)	

Figure 97. Element 5.12 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, text box with autocompletion.



You were headed
N ▼ On Norman
Street name

Figure 98. Element 5.12 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

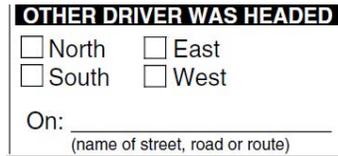
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.13: OTHER DRIVER WAS HEADED

OTAI Paper Form



OTHER DRIVER WAS HEADED

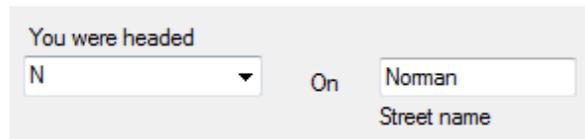
North East
 South West

On: _____
(name of street, road or route)

Figure 99. Element 5.13 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, text box with autocompletion



You were headed

N On Norman
Street name

Figure 100. Element 5.13 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.14: WITNESS INFORMATION

OTAI Paper Form



WITNESS INFORMATION:

Figure 101. Element 5.14 of the OTAI Paper Form

Online OTAI Form Equivalent

Textbox



Witness information
[Empty text input field]

Figure 102. Element 5.14 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.15: DRIVER AND PASSENGER INJURY AND SAFETY INFORMATION

OTAI Paper Form

DRIVER AND PASSENGER INJURY AND SAFETY EQUIPMENT INFORMATION					
SAFETY EQUIPMENT CODES WRITE one of the codes (0-10) in column C			INJURY CODE FOR OCCUPANTS WRITE one of the codes (1-5) in column D		
0 No seat belt available 1 Seat belt available but NOT used 2 Seat belt available and in use 3 Child restraint device available 4 Child restraint device in use 5 Child restraint device not available 6 Helmet NOT in use 7 Helmet in use 8 Air bag deployed 9 Air bag available - NOT deployed 10 Air bag NOT available			1 Deceased as a result of the accident 2 Incapacitated - unconscious, could not walk, broken or distorted limbs, etc. 3 Visible injury - lump, abrasion cuts 4 Momentary unconsciousness, complaint of pain, nausea, limping 5 No apparent injury		
SEAT POSITION	PASSENGER'S NAMES (your vehicle)	A	B	C	D
		SEX	AGE	SFTY EOP AIR BAG	INJURY
DRIVER					
FRONT CENTER					
FRONT RIGHT					
MIDDLE* LEFT					
MIDDLE* CENTER					
MIDDLE* RIGHT					
REAR LEFT					
REAR CENTER					
REAR RIGHT					
* Use only for vehicles with middle row of seats (i.e., vans, SUVs, etc.)					

Figure 103. Element 5.15 of the OTAI Paper Form

Online OTAI Form Equivalent

The online form includes a seat map on the left showing a red car with seats numbered 1 through 9. Seat 1 is the driver's seat. The table on the right is titled "Driver and passenger injury and safety equipment information".

Seat position	Passenger's name (your vehicle)	Sex	Age	Safety eq.	Air bag?	Injury
1 (driver)	Carl Orff	M	44	Helmet in use	No	No apparent injury
2						
3						
4						
5						
6						
7						
8						
9						

Annotations in the image include "Seat map" in red above the car, "Table layout panel" in red with an arrow pointing to the table, "Text boxes" in red with arrows pointing to the input fields, and "Combo-boxes" in red with an arrow pointing to the dropdown menus in the table.

Figure 104. Element 5.15 Online OTAI Form Equivalent

Use Cases

Table 19: Element 5.15 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Injury combo box	User selects option 5: no apparent injury.	Form will check if element 3.4 was checked. If this is the case a message will appear informing the user that he stated that someone was injured.
Alternative	User selects any option from 1 through 4.	Form will check if element 3.4 was checked. If it was not checked a message will appear informing the user that he stated that no one was injured.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers in the age text box. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 5.16: IF THIS ACCIDENT INVOLVED A PEDESTRIAN OR BICYCLIST, COMPLETE THE FOLLOWING

OTAI Paper Form

Figure 105. Element 5.16 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box and text box.

Figure 106. Element 5.16 Online OTAI Form Equivalent

Use Cases

Table 20: Element 5.16 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects any option in the checked list box.	Form will show Elements 5.17 through 5.22
Alternative	User does not select any option in the checked list box.	Form will go to Element 5.23

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 5.17, 5.18 AND 5.19

OTAI Paper Form

Pedestrian or bicyclist was going: <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W
ALONG OR ACROSS: (name of street, road or route)
From:
To:
EXAMPLE: (From: NE corner To: SE corner (or) From: East side To: West side, etc.)

Figure 107. Elements 5.17, 5.18 and 5.19 of the OTAI Paper Form
Online OTAI Form Equivalent

Combo box, combo box with auto completion, text box.

Pedestrian or bicyclist was going	S	Along or across	383 Norman
From	East side	to	West side

Figure 108. Elements 5.17, 5.18 and 5.19 Online OTAI Form Equivalent
Type of Field

Optional.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.20: SEX AND AGE OF THE PEDESTRIAN / BICYCLIST

OTAI Paper Form

Sex and age of pedestrian / bicyclist:
 Male Female Age: _____

Figure 109. Element 5.20 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, text box.

Sex M ▼ Age 23

Figure 110. Element 5.20 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.21: EXTENT OF PEDESTRIAN / BICYCLIST INJURY

OTAI Paper Form

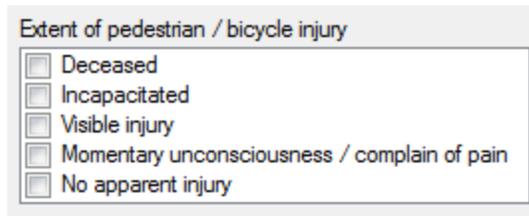
Extent of pedestrian / bicyclist injury:

<input type="checkbox"/> Deceased	<input type="checkbox"/> Momentary unconsciousness /complaint of pain
<input type="checkbox"/> Incapacitated	<input type="checkbox"/> No apparent injury
<input type="checkbox"/> Visible injury	

Figure 111. Element 5.21 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Extent of pedestrian / bicycle injury

- Deceased
- Incapacitated
- Visible injury
- Momentary unconsciousness / complain of pain
- No apparent injury

Figure 112. Element 5.21 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.22: PEDESTRIAN / BICYCLE ACTION

OTAI Paper Form

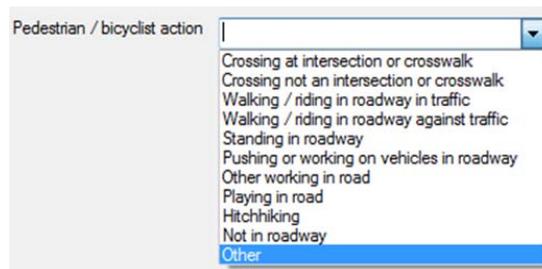
Pedestrian / bicyclist action: (mark one)

- Crossing at intersection or crosswalk
- Crossing **not** at intersection or crosswalk
- Walking / riding in roadway with traffic
- Walking / riding in roadway **against** traffic
- Standing in roadway
- Pushing or working on vehicles in roadway
- Other working in road
- Playing in road
- Hitchhiking
- Not in roadway
- Other _____ (specify)

Figure 113. Element 5.22 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box, a text box will appear if the “Other” option is selected.



The screenshot shows a web form with a label 'Pedestrian / bicyclist action' and a dropdown menu. The dropdown menu is open, displaying a list of options: 'Crossing at intersection or crosswalk', 'Crossing not an intersection or crosswalk', 'Walking / riding in roadway in traffic', 'Walking / riding in roadway against traffic', 'Standing in roadway', 'Pushing or working on vehicles in roadway', 'Other working in road', 'Playing in road', 'Hitchhiking', 'Not in roadway', and 'Other'. The 'Other' option is highlighted in blue, indicating it is the selected choice.

Figure 114. Element 5.22 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

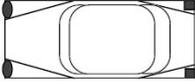
The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 5.23: VEHICLE DAMAGE

OTAI Paper Form

Vehicle Damage

FRONT 

USE ARROW TO SHOW FIRST IMPACT (SHADE IN DAMAGED AREA)

Vehicle towed
 Rollover
 Under car
 Totaled
 Unknown

Your Vehicle (No. 1) damage: \$ _____ .

Figure 115. Element 5.23 of the OTAI Paper Form

Online OTAI Form Equivalent

Instructions.
1. - Use the Marker tool (drag and drop) to specify the first impact on the vehicle
2.- Then use the brush to pain on the car any additional damage
3.- Use the eraser to clean the car if you made any mistakes

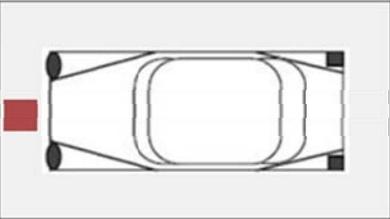
Vehicle damage

Tools

Marker  drag me

Brush  Labels or picture box

Eraser 



Vehicle damage Vehicle towed
 Rollover
 Under car
 Totaled
 Unknown

Amount in dollars if known

Figure 116. Element 5.23 Online OTAI Form Equivalent

Description

The objective of this tool is to allow the user to describe graphically where the damage on the vehicle was. The first impact has to be shown with some kind of marker as the one shown in Figure 116. The marker should be able to be placed around the shape of the vehicle.

The damaged area should be shown by means of a modification of the vehicle picture via brushes, like in the brush tool found in Microsoft's Paint program.

The eraser tool will be used to remove the marker and brushes.

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Use Cases

Table 21: Element 5.23 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Marker	The user drags and drops the marker onto the sides of the car.	The pointer will change to the default one. A red marker will appear when it was dropped as seen in Figure 15. The marker image will become disabled.
Brush	The user clicks on the brush icon. The user clicks afterwards on the car bitmap.	The pointer will change to a brush-like pointer The places on the car where the user clicks will become painted like in MS Paint program.
Eraser	The user clicks on the eraser icon. The user clicks on either markers or spots that have been painted with the brush.	The markers or painted spots will be “cleaned”. If a marker was cleaned, the marker icon will become enabled if it was disabled.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The textbox will use validation to only allow integers. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled until the user enters a new string.
2. When the user submits the form the information will be saved into a database. The bitmap of the vehicle will be saved with the modifications of the brush and marker.

ELEMENT 5.24: DIAGRAM

OTAI Paper Form

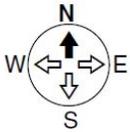
Diagram  Number each vehicle:   Show path by:  Show pedestrian/bicyclist by:  Show railroad tracks by: 		 -- (name of street, road or route)
_____	_____	
_____	_____	
-- (name of street, road or route) ↑	-- (name of street, road or route) ↑	

Figure 117. Element 5.24 of the OTAI Paper Form

Online OTAI Form Equivalent

This is the online drawing tool.

Description

The objective of this tool is to allow the user to specify on a diagram the crash situation exactly at the time of the crash and afterwards the path the vehicles followed after the impact.

Type of Field

Required.

Data Resources Needed

1. The information obtained in Element.
2. Database where the collected information will be uploaded.

ELEMENT 5.25: ADDITIONAL ELEMENT FOR SECTION 5, MOTOR CARRIER INFORMATION

Is this a motor carrier report?

- Yes
- No

Figure 118. Element 5.25

Type of Field

Required.

Data Resources Needed

1. Database where the information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. If the user pressed “yes” then the form will present section 6.
2. If the user presses “no” then the user will be presented with the final screen to submit the complete report.

SECTION 6 OF THE OTAI PAPER FORM: MOTOR CARRIER CRASH REPORT

QUALIFYING VEHICLE <input type="checkbox"/> COMMERCIAL TRUCK (GVWR OVER 10,000 LBS OR ACTUAL WT AT TIME OF CRASH EVEN IF GVWR IS SET UNDER 10,000 LBS.) <input type="checkbox"/> HAZARDOUS MATERIAL FLAGCARD <input type="checkbox"/> COMMERCIAL BUS (DESIGNED FOR 8 OR MORE PASSENGERS) <input type="checkbox"/> FARM TRUCK INTERSTATE (OVER 10,000 LBS.) <input type="checkbox"/> FARM TRUCK FOR-HIRE (4 OR MORE AXLES) 1 <input type="checkbox"/> FARM TRUCK TOWING TRIPLE TRAILERS <input type="checkbox"/> FARM TRUCK (OVER 80,000 LBS.)		CRITERIA <input type="checkbox"/> ANY PERSON SUSTAINING A FATALITY (WITHIN 30 DAYS OF THE ACCIDENT) <input type="checkbox"/> ANY PERSON SUSTAINING INJURIES REQUIRING TREATMENT AWAY FROM THE SCENE <input type="checkbox"/> ANY VEHICLE INCURRING DISABLING DAMAGE REQUIRING REMOVAL FROM THE SCENE BY A TOW TRUCK OR ANOTHER MOTOR VEHICLE 2	
MOTOR CARRIER NAME 3		US DOT NUMBER 4	AUTHORITY/FILE NUMBER 5
ADDRESS 6		CITY 7	STATE 8 ZIP CODE 9
DRIVER INFORMATION			
DRIVER NAME (LAST, FIRST, MIDDLE) 10		DATE OF BIRTH 11	LENGTH OF EMPLOYMENT YEARS 12 MONTHS
CDL /DL NUMBER 13	STATE 14	LICENSE CLASS <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> M 15	EXPIRATION DATE OF MEDICAL CERTIFICATE 16
COMPLETE THE FOLLOWING TWO QUESTIONS AS IF DOING A RECAP OF HOURS IN TIME DOCUMENTS AT TIME OF THE ACCIDENT.			
AT TIME OF THE ACCIDENT, TOTAL HOURS DRIVING SINCE LAST OFF-DUTY PERIOD. 17		TOTAL HOURS ON DUTY DURING THE PREVIOUS (FILL OUT ONE ONLY, BASED ON TIME DOCUMENTS) 18 7 CONSECUTIVE DAYS _____ 8 CONSECUTIVE DAYS _____	
DOES YOUR DRIVER HAVE A MEDICAL WAIVER 19 <input type="checkbox"/> YES <input type="checkbox"/> NO		TYPE OF WAIVER (SIGHT, DIABETES, AMPUTEE, ETC.) 20	
DRIVER INJURY INFORMATION			
YOUR DRIVER KILLED <input type="checkbox"/> YES 21 <input type="checkbox"/> NO	YOUR DRIVER INJURED <input type="checkbox"/> YES 22 <input type="checkbox"/> NO	RELIEF DRIVER KILLED <input type="checkbox"/> YES 23 <input type="checkbox"/> NO	RELIEF DRIVER INJURED <input type="checkbox"/> YES 24 <input type="checkbox"/> NO
TOTAL NUMBER OF OTHER DRIVERS KILLED 26 INJURED		TOTAL NUMBER OF OTHER PASSENGERS KILLED 27 INJURED	
TOTAL NUMBER OF PEDESTRIANS KILLED 28 INJURED		TOTAL NUMBER OF BICYCLISTS KILLED 29 INJURED	
OTHER MOTOR CARRIER INFORMATION (IF 2 OR MORE MOTOR CARRIERS WERE INVOLVED)			
MOTOR CARRIER NAME	VEHICLE LICENSE # AND STATE	DRIVER'S NAME	DRIVER'S LICENSE # AND STATE
	30		
MOTOR CARRIER VEHICLE INFORMATION 31			
YEAR	MAKE	UNIT NUMBER	TRUCK/TRACTOR/BUS LICENSE PLATE NO. & STATE
TOTAL NO. OF AXLES INCLUDING TRAILERS			
VEHICLE TYPE (SELECT APPROPRIATE TYPE) 32			
<input type="checkbox"/> 1 Triple (tractor with 3 trailers)	<input type="checkbox"/> 5 Standard Tractor/Trailer	<input type="checkbox"/> 9 Heavy Haul	
<input type="checkbox"/> 2 Triple (truck with 2 trailers)	<input type="checkbox"/> 6 Straight Truck	<input type="checkbox"/> 10 Bus/Van (8 or more passenger capacity)	
<input type="checkbox"/> 3 Straight truck-1 trailer	<input type="checkbox"/> 7 Dump	<input type="checkbox"/> 11 Auto/Truck	
<input type="checkbox"/> 4 Double (jey)	<input type="checkbox"/> 8 Sediment		

735-92294-051

CONTINUED ON REVERSE

Figure 119. Section 6 of the OTAI Paper Form: Motor Carrier Crash Report

CARGO BODY TYPE (CIRCLE ONE)					
VAN	FLATBED	TANKER	CONTAINER		
MOBILE HOME TOWER	PASSENGER	DROP-BOX	GARBAGE		
WRECKER	FIXED LOAD	HEAVY HAUL	UTILITY		
POLE	DUMP	BELLY-DUMP	CAR CARRIER		
LIVESTOCK	BULK-HOPPER	MIXER	SADDLEMOUNT		
TOTAL LENGTH OF VEHICLE/COMB		TOTAL WIDTH OF VEHICLE OR CARGO			
34		35			
TOTAL CARGO WEIGHT		GROSS VEHICLE WEIGHT			
36		37			
COMMODITY INFORMATION					
COMMODITY BEING TRANSPORTED AT TIME OF CRASH					
38					
WAS A HAZARDOUS COMMODITY BEING HAULED		WAS HAZARDOUS MATERIAL RELEASED FROM THE VEHICLE CARGO (NOT A FUEL RELEASE)			
<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> YES <input type="checkbox"/> NO			
39		40			
HAZARD CLASS					
41					
CRASH INFORMATION					
LOCATION OF CRASH (NEAREST CITY OR TOWN)		HIGHWAY AND MILE POINT/STREET/COUNTY ROAD			
42		43			
DIRECTION OF YOUR VEHICLE (CIRCLE)					
44 N S E W					
DATE OF CRASH	TIME	<input type="checkbox"/> AM <input type="checkbox"/> PM	DAY OF THE WEEK (CIRCLE ONE)		
45	46		47 MON TUES WED THU FRI SA SUN		
CONDITIONS AT TIME OF ACCIDENT					
WEATHER (CIRCLE ONE)	1. CLEAR	2. RAIN	3. SNOW		
48					
ROAD SURFACE (CIRCLE ONE)	1. DRY	2. WET	3. SNOWY		
LIGHT CONDITION (CIRCLE ONE)	1. DAY	2. DAWN	3. DUSK		
			4. CLOUDY 5. SLEET 6. FOG 7. OTHER _____		
			4. ICY 5. OTHER _____		
			4. ARTIFICIAL LIGHTS 5. DARK 6. OTHER _____		
DESCRIBE WHAT HAPPENED BY CHECKING ALL BOXES THAT APPLY. YOUR VEHICLE IS ALWAYS NO. 1. IF OTHER VEHICLES WERE INVOLVED, COMPLETE COLUMNS 2 & 3 TO CORRESPOND TO THE ACTIONS OF THE SAME NUMBERED VEHICLES LISTED ABOVE UNDER "OTHER DRIVER INFORMATION".					
VEHICLES 1 2 3	ACTION	VEHICLES 1 2 3	ACTION	VEHICLES 1 2 3	ACTION
	SLOWING - STOPPING		PASSING		JACKKNIFE
	STOPPED		CHANGING LANES		OVERTURN
	REAR-END		SIDESWIPE		SEPARATION OF UNITS
	BACKING		HEAD-ON		FIRE
	MAKING RIGHT TURN		SKIDDING		EXPLOSION
	MAKING LEFT TURN		VEHICLE OUT OF CONTROL		CARGO SHIFT
	MAKING U TURN		ROLL-AWAY		CARGO SPILL (HAZARDOUS)
	PROCEEDING STRAIGHT		CONTROLLED RR CROSSING		CARGO SPILL (NON-HAZARDOUS)
	INTERSECTION		UNCONTROLLED RR CROSSING		OTHER (DEER, GUARDRAIL, ETC)
	ENTERING TRAFFIC (FROM SHOULDER, DITCH, OR PRIVATE DRIVE)		RAN OFF ROAD		
DID YOUR VEHICLE STRIKE A PARKED VEHICLE		WAS YOUR PARKED VEHICLE STRUCK BY ANOTHER VEHICLE			
<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> YES <input type="checkbox"/> NO			
50		51			
DESCRIPTION OF ACCIDENT BY CARRIER OFFICIAL					
52					
NAME AND TITLE OF PERSON SIGNING REPORT		TELEPHONE NUMBER(S)			
53		54			
SIGNATURE I CERTIFY THE INFORMATION PROVIDED IS TRUE AND ACCURATE		DATE			
55		56			

Figure 113. Section 6 of the OTAI Paper Form: Motor Carrier Crash Report (cont.)

ELEMENT 6.1: QUALIFYING VEHICLE

OTAI Paper Form

QUALIFYING VEHICLE

- COMMERCIAL TRUCK (GVWR OVER 10,000 LBS OR ACTUAL WT AT TIME OF CRASH EVEN IF GVWR IS SET UNDER 10,000 LBS)
- HAZARDOUS MATERIAL PLACARD
- COMMERCIAL BUS (DESIGNED FOR 8 OR MORE PASSENGERS)
- FARM TRUCK INTERSTATE (OVER 10,000 LBS.)
- FARM TRUCK FOR-HIRE (4 OR MORE AXLES)
- FARM TRUCK TOWING TRIPLE TRAILERS
- FARM TRUCK (OVER 80,000 LBS.)

Figure 120. Element 6.1 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.

Qualifying vehicle

- Commercial bus (designed for 8 or more passengers)
- Commercial truck (GVWR over 10,000 LBS or actual WT at time of crash even if GVWR is set under 10,000)
- Farm truck (over 80,000 LBS)
- Farm truck for hire (4 or more axles)
- Farm truck interstate (over 10,000 LBS)
- Farm truck towing triple trailers
- Hazardous material placard

Figure 121. Element 6.1 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.2: CRITERIA

OTAI Paper Form

CRITERIA

- ANY PERSON SUSTAINING A FATALITY (WITHIN 30 DAYS OF THE ACCIDENT)
- ANY PERSON SUSTAINING INJURIES REQUIRING TREATMENT AWAY FROM THE SCENE
- ANY VEHICLE INCURRING DISABLING DAMAGE REQUIRING REMOVAL FROM THE SCENE BY A TOW TRUCK OR ANOTHER MOTOR VEHICLE

Figure 122. Element 6.2 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box

The screenshot shows a form titled "Criteria" with a checked list box containing three items:

- Any person sustaining a fatality (within 30 days of the accident)
- Any person sustaining injuries requiring treatment away from the scene
- Any vehicle incurring disabling damage requiring removal from the scene by a tow or another motor vehicle

Figure 123. Element 6.2 Online OTAI Form Equivalent

Use Cases

Table 22: Element 6.2 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list boxes from Elements 6.1 and Element 6.2	User selects any one option from Element 6.1 AND any one option from Element 6.2.	A red label will appear with the text: <i>This accident is reportable, you are required to complete and submit this report</i>

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.3: MOTOR CARRIER NAME

OTAI Paper Form



A rectangular text box with a thin black border. The text "MOTOR CARRIER NAME" is printed in a light gray font at the top left of the box.

Figure 124. Element 6.3 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



A light gray rectangular background containing the text "Motor carrier name" in a small, dark gray font. To the right of the text is a white rectangular text input field with a thin gray border.

Figure 125. Element 6.3 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

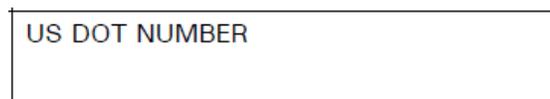
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.4: US DOT NUMBER

OTAI Paper Form



A rectangular text box with a thin black border. The text "US DOT NUMBER" is printed in a light gray font at the top left of the box.

Figure 126. Element 6.4 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

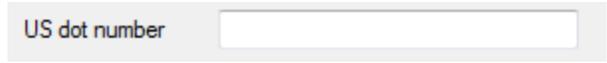


Figure 127. Element 6.4 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

- 1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

- 1. The information will be stored into the database.

ELEMENT 6.5: AUTHORITY / FILE NUMBER

OTAI Paper Form

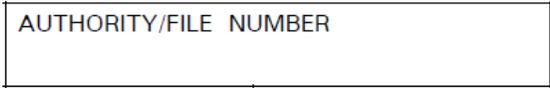


Figure 128. Element 6.5 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Figure 129. Element 6.5 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

- 1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 6.6, 6.7, 6.8 AND 6.9: ADDRESS, CITY, STATE AND ZIP CODE

OTAI Paper Form

ADDRESS	CITY	STATE	ZIP CODE
---------	------	-------	----------

Figure 130. Elements 6.6, 6.7, 6.8 and 6.9 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box, text box, combo box, combo box, text box.



The screenshot shows a form with five input fields: a text box containing '442' labeled 'Number', a text box containing '23' labeled 'Street name', a dropdown menu with 'Or' selected labeled 'State', a dropdown menu with 'Corvallis' selected labeled 'City', and a text box containing '3322' labeled 'Zip code'.

Figure 131. Elements 6.6, 6.7, 6.8 and 6.9 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the roads of the county selected in Element 1.4 of the OTAI Paper Form. This information will be used to populate the combo box that displays the roads.
2. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use data validation to only allow integers in the *number* text box. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.10: DRIVER INFORMATION, DRIVER NAME

OTAI Paper Form



DRIVER NAME (LAST, FIRST, MIDDLE)

Figure 132. Element 6.10 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box, text box, text box.



Last First Middle

Figure 133. Element 6.10 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.11: DRIVER INFORMATION, DATE OF BIRTH

OTAI Paper Form

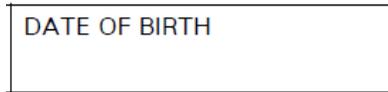


Figure 134. Element 6.11 of the OTAI Paper Form

Online OTAI Form Equivalent

Date, time picker.

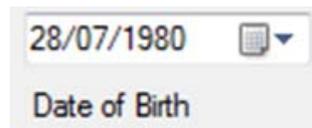


Figure 135. Element 6.11 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.12: DRIVER INFORMATION, LENGTH OF EMPLOYMENT

OTAI Paper Form

LENGTH OF EMPLOYMENT	
YEARS	MONTHS

Figure 136. Element 6.12 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box, text box.

Years	<input type="text"/>	Months	<input type="text"/>
-------	----------------------	--------	----------------------

Figure 137. Element 6.12 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

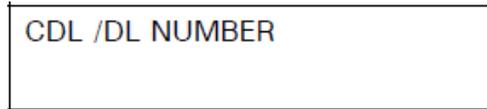
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.13: DRIVER INFORMATION, CDL / DL NUMBER

OTAI Paper Form



CDL /DL NUMBER

Figure 138. Element 6.13 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



CDL / DL Number

Figure 139. Element 6.13 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.14: STATE

OTAI Paper Form

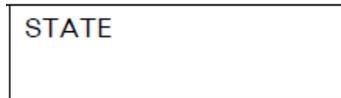


Figure 140. Element 6.14 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo box.

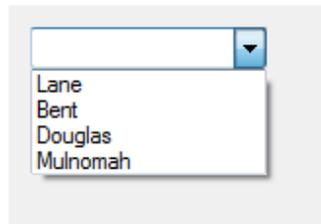


Figure 141. Element 6.14 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database listing the states of the country. This information will be used to populate the state combo box.
2. Database where the collected information will be uploaded.

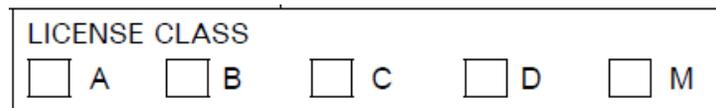
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.15: LICENSE CLASS

OTAI Paper Form



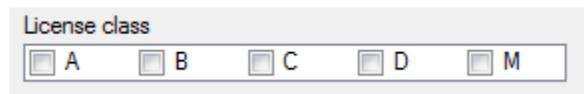
LICENSE CLASS

A B C D M

Figure 142. Element 6.15 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



License class

A B C D M

Figure 143. Element 6.15 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

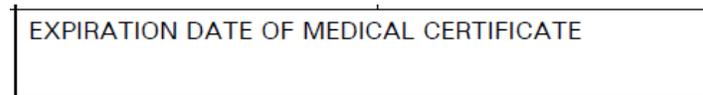
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.16: EXPIRATION DATE OF MEDICAL CERTIFICATE

OTAI Paper Form

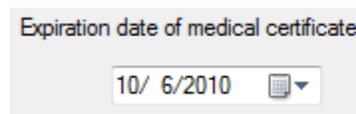


EXPIRATION DATE OF MEDICAL CERTIFICATE

Figure 144. Element 6.16 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Expiration date of medical certificate

10/ 6/2010

Figure 145. Element 6.16 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.17: HOURS DRIVING

OTAI Paper Form

AT TIME OF THE ACCIDENT, TOTAL HOURS
DRIVING SINCE LAST OFF-DUTY PERIOD. _____

Figure 146. Element 6.17 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

At time of the accident, total hours
driving since last off duty period.

Figure 147. Element 6.17 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.18: HOURS DRIVING

OTAI Paper Form

TOTAL HOURS ON DUTY DURING THE PREVIOUS (FILL OUT ONE ONLY, BASED ON TIME DOCUMENTS)	7 CONSECUTIVE DAYS _____ 8 CONSECUTIVE DAYS _____
---	--

Figure 148. Element 6.18 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

Total hours on duty during previous	Fill out just one based on documents
7 consecutive days	<input type="text"/>
8 consecutive days	<input type="text"/>

Figure 149. Element 6.18 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

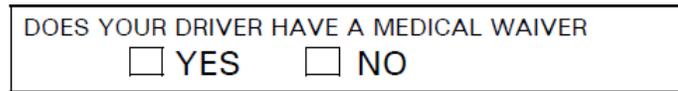
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.19: DOES YOUR DRIVER HAVE A MEDICAL WAIVER?

OTAI Paper Form

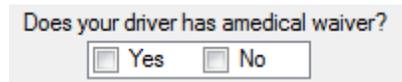


DOES YOUR DRIVER HAVE A MEDICAL WAIVER
 YES NO

Figure 150. Element 6.19 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Does your driver has a medical waiver?
 Yes No

Figure 151. Element 6.19 Online OTAI Form Equivalent

Use Cases

Table 23: Element 6.19 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects the <i>yes</i> option.	Form will show Element 6.20
Alternative	User selects the <i>no</i> option.	Form will not show Element 6.20

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.20: TYPE OF WAIVER?

OTAI Paper Form

TYPE OF WAIVER (SIGHT, DIABETES, AMPUTEE, ETC.)

Figure 152. Element 6.20 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

Type of waiver (sight, diabetes, amputee etc)
<input type="text"/>

Figure 153. Element 6.20 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.21: YOUR DRIVER KILLED?

OTAI Paper Form



Figure 154. Element 6.21 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.

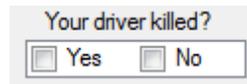


Figure 155. Element 6.21 Online OTAI Form Equivalent

Use Cases

Table 24: Element 6.21 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects the <i>yes</i> option.	Form will not show Element 6.22
Alternative	User selects the <i>no</i> option.	Form will show Element 6.22

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.22: YOUR DRIVER INJURED?

OTAI Paper Form

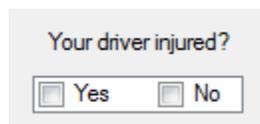


YOUR DRIVER INJURED
 YES NO

Figure 156. Element 6.22 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Your driver injured?
 Yes No

Figure 157. Element 6.22 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.23: RELIEF DRIVER KILLED?

OTAI Paper Form

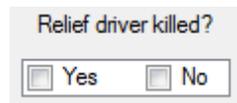


RELIEF DRIVER KILLED
 YES NO

Figure 158. Element 6.23 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Relief driver killed?
 Yes No

Figure 159. Element 6.23 Online OTAI Form Equivalent

Use Cases

Table 25: Element 6.23 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects the <i>yes</i> option.	Form will not show Element 6.24
Alternative	User selects the <i>no</i> option.	Form will show Element 6.24

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

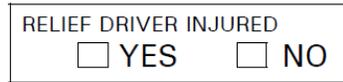
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.24: RELIEF DRIVER INJURED?

OTAI Paper Form

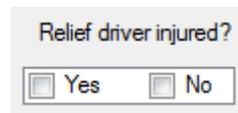


RELIEF DRIVER INJURED
 YES NO

Figure 160. Element 6.24 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Relief driver injured?
 Yes No

Figure 161. Element 6.24 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.25: TOTAL NUMBER OF PASSENGERS

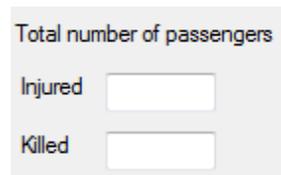
OTAI Paper Form

TOTAL NUMBER OF PASSENGERS	
_____ KILLED	_____ INJURED

Figure 162. Element 6.25 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.



Total number of passengers

Injured

Killed

Figure 163. Element 6.25 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.26: TOTAL NUMBER OF OTHER DRIVERS

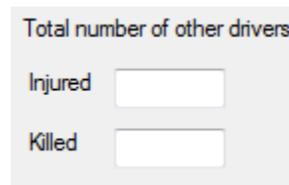
OTAI Paper Form

TOTAL NUMBER OF OTHER DRIVERS	
____ KILLED	____ INJURED

Figure 164. Element 6.26 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.



Total number of other drivers

Injured

Killed

Figure 165. Element 6.26 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.27: TOTAL NUMBER OF OTHER PASSENGERS

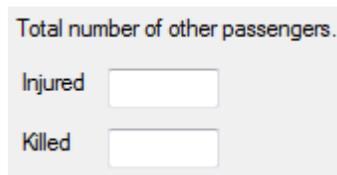
OTAI Paper Form

TOTAL NUMBER OF OTHER PASSENGERS	
____ KILLED	____ INJURED

Figure 166. Element 6.27 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.



Total number of other passengers.

Injured

Killed

Figure 167. Element 6.27 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.28: TOTAL NUMBER OF PEDESTRIANS

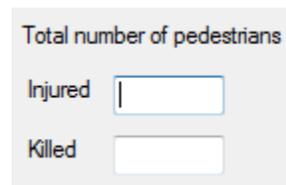
OTAI Paper Form

TOTAL NUMBER OF PEDESTRIANS	
_____ KILLED	_____ INJURED

Figure 168. Element 6.28 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.



Total number of pedestrians

Injured

Killed

Figure 169. Element 6.28 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.29: TOTAL NUMBER OF BICYCLISTS

OTAI Paper Form

TOTAL NUMBER OF BICYCLISTS	
____ KILLED	____ INJURED

Figure: 163 Element 6.29 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.

Total number of bicyclists	
Injured	<input type="text"/>
Killed	<input type="text"/>

Figure: 164 Element 6.29 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.30: OTHER MOTOR CARRIER INFORMATION

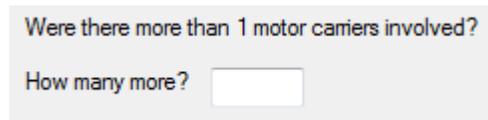
OTAI Paper Form

MOTOR CARRIER NAME	VEHICLE LICENSE # AND STATE	DRIVER'S NAME	DRIVER'S LICENSE # AND STATE

Figure 170. Element 6.30 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Were there more than 1 motor carriers involved?
How many more?

Figure 171. Element 6.30 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

Database where the collected information will be uploaded.

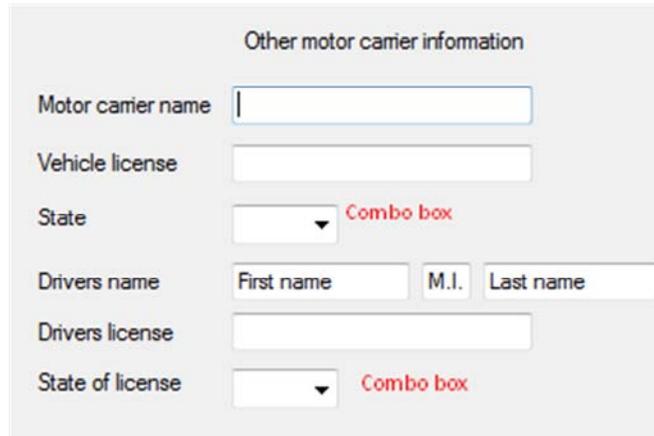
Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the text boxes. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. Depending on the number written in this field, element 6.30.1 will be repeated for every driver. If the number “2” was written then element 6.30.1 will cycle two times.
3. The information will be stored into the database.

ELEMENT 6.30.1: OTHER MOTOR CARRIER INFORMATION

Text and combo boxes.



The image shows a form titled "Other motor carrier information" with the following fields:

- Motor carrier name: A single-line text input box.
- Vehicle license: A single-line text input box.
- State: A dropdown menu with a downward arrow and the text "Combo box" to its right.
- Drivers name: Three separate text input boxes labeled "First name", "M.I.", and "Last name".
- Drivers license: A single-line text input box.
- State of license: A dropdown menu with a downward arrow and the text "Combo box" to its right.

Figure 172. Element 6.30.1 of the online form

ELEMENT 6.31: MOTOR CARRIER VEHICLE INFORMATION

OTAI Paper Form

YEAR	MAKE	UNIT NUMBER	TRUCK/TRACTOR/BUS LICENSE PLATE NO. & STATE	TOTAL NO. OF AXLES INCLUDING TRAILERS
------	------	-------------	---	---------------------------------------

Figure 173. Element 6.31 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes and combo box for *plate state*.

The screenshot shows a form titled "Motor carrier vehicle information" with the following fields:

- Year:
- Make:
- Unit number:
- Plate:
- Plate state: (dropdown menu)
- Total number of axles including trailers:

Figure 174. Element 6.31 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the following text boxes: year, *total number of axles including trailers*. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.32: VEHICLE TYPE

OTAI Paper Form

VEHICLE TYPE (SELECT APPROPRIATE TYPE)

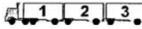
<input type="checkbox"/> 1  Triples (tractor with 3 trailers)	<input type="checkbox"/> 5  Standard Tractor/Semi Trailer	<input type="checkbox"/> 9  Heavy Haul
<input type="checkbox"/> 2  Triples (truck with 2 trailers)	<input type="checkbox"/> 6  Straight Truck	<input type="checkbox"/> 10  Bus/Van (8 or more passenger capacity)
<input type="checkbox"/> 3  Straight truck-full trailer	<input type="checkbox"/> 7  Bobtail	<input type="checkbox"/> 11  Auto/Pickup
<input type="checkbox"/> 4  Doubles (any)	<input type="checkbox"/> 8  Saddlemount	

Figure 175. Element 6.32 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.

Vehicle type

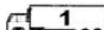
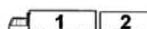
<input checked="" type="checkbox"/> Triples (tractor with 3 trailers) 	<input type="checkbox"/> Standard tractor / semi trailer 	<input type="checkbox"/> Heavy haul 
<input checked="" type="checkbox"/> Triples (truck with 2 trailers) 	<input type="checkbox"/> Straight truck 	<input checked="" type="checkbox"/> Bus/van (8 or more passengers) 
<input type="checkbox"/> Straight truck full trailer 	<input type="checkbox"/> Bobtail 	<input type="checkbox"/> Auto/pickup 
<input type="checkbox"/> Doubles (any) 	<input type="checkbox"/> Saddlemount 	

Figure 176. Element 6.32 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will check if only one of the fields was used. If more than one were used then an error message will be displayed.
2. The information will be stored into the database.

ELEMENT 6.33: CARGO BODY TYPE

OTAI Paper Form

CARGO BODY TYPE (CIRCLE ONE)								
VAN	FLATBED	TANKER	CONTAINER	POLE	DUMP	BELLY-DUMP	CAR CARRIER	LIVESTOCK
MOBILE HOME TOTER	PASSENGER	DROP-BOX	GARBAGE	BULK-HOPPER	MIXER	SADDLEMOUNT		
WRECKER	FIXED LOAD	HEAVY HAUL	UTILITY					

Figure 177. Element 6.33 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.

Cargo body type

<input type="checkbox"/> Van	<input type="checkbox"/> Livestock	<input type="checkbox"/> Wrecker
<input type="checkbox"/> Flatbed	<input type="checkbox"/> Mobile home toter	<input type="checkbox"/> Fixed load
<input type="checkbox"/> Tanker	<input type="checkbox"/> Passenger	<input type="checkbox"/> Heavy haul
<input type="checkbox"/> Container	<input type="checkbox"/> Drop box	<input type="checkbox"/> Utility
<input type="checkbox"/> Pole	<input type="checkbox"/> Garbage	
<input type="checkbox"/> Dump	<input type="checkbox"/> Bulk-hopper	
<input type="checkbox"/> Belly dump	<input type="checkbox"/> Mixer	
<input type="checkbox"/> Car carrier	<input type="checkbox"/> Saddlemount	

Figure 178. Element 6.33 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will check if only one of the fields was used. If more than one were used then an error message will be displayed.
2. The information will be stored into the database.

ELEMENT 6.34: TOTAL LENGTH OF VEHICLE

OTAI Paper Form



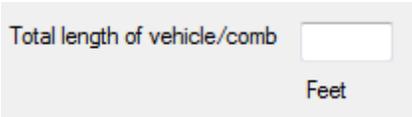
TOTAL LENGTH OF VEHICLE/COMB

Figure 179. Element 6.34 of the OTAI Paper Form

Figure: 174

Online OTAI Form Equivalent

Text box.



Total length of vehicle/comb

Feet

Figure 180. Element 6.34 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded

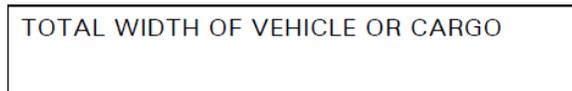
Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow numbers in the textbox. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.35: TOTAL WIDTH OF VEHICLE OR CARGO

OTAI Paper Form

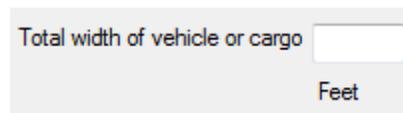


TOTAL WIDTH OF VEHICLE OR CARGO

Figure 181. Element 6.35 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Total width of vehicle or cargo

Feet

Figure 182. Element 6.35 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow numbers in the textbox. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.36: CARGO WEIGHT

OTAI Paper Form

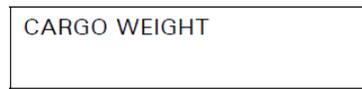


Figure 183. Element 6.36 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

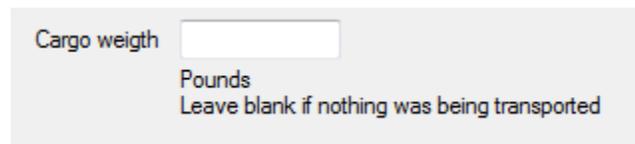


Figure 184. Element 6.36 Online OTAI Form Equivalent

Type of Field

Optional.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow numbers in the textbox. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. If no value was entered, the form will assume that nothing was being transported. In this case the form will go to element 6.42
3. The information will be stored into the database.

ELEMENT 6.37: GROSS VEHICLE WEIGHT

OTAI Paper Form

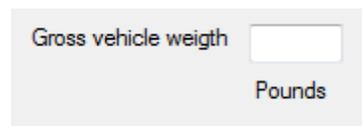


GROSS VEHICLE WEIGHT

Figure 185. Element 6.37 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Gross vehicle weight
Pounds

Figure 186. Element 6.37 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow numbers in the textbox. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.38: COMMODITY BEING TRANSPORTED AT TIME OF CRASH

OTAI Paper Form

COMMODITY BEING TRANSPORTED AT TIME OF CRASH

Figure 187. Element 6.38 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

Commodity being transported at time of crash

Figure 188. Element 6.38 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.39: WAS A HAZARDOUS COMMODITY BEING HAULED

OTAI Paper Form

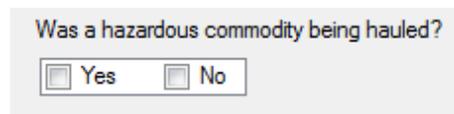


WAS A HAZARDOUS COMMODITY BEING HAULED
 YES NO

Figure 189. Element 6.39 of the DVV form

Online OTAI Form Equivalent

Checked list box.



Was a hazardous commodity being hauled?
 Yes No

Figure 190. Element 6.39 Online OTAI Form Equivalent

Use Cases

Table 26: Element 6.39 use cases

SUB ELEMENT OF FORM INVOLVED	STEPS	OUTCOME
Checked list box	User selects the <i>yes</i> option.	The form will show Elements 6.40 and 6.41
Alternative	User selects the <i>no</i> option	The form will not show Elements 6.40 and 6.41

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.40: WAS A HAZARDOUS COMMODITY RELEASED FROM THE VEHICLE CARGO

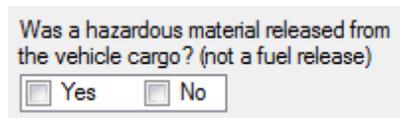
OTAI Paper Form

WAS HAZARDOUS MATERIAL RELEASED FROM THE VEHICLE CARGO(NOT A FUEL RELEASE)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
--	------------------------------	-----------------------------

Figure 191. Element 6.40 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Was a hazardous material released from the vehicle cargo? (not a fuel release)

Yes No

Figure 192. Element 6.40 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

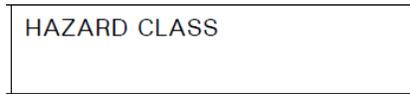
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENT 6.41: HAZARD CLASS

OTAI Paper Form



HAZARD CLASS

Figure 193. Element 6.41 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Hazard class

Figure 194. Element 6.41 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.42: LOCATION OF CRASH

OTAI Paper Form

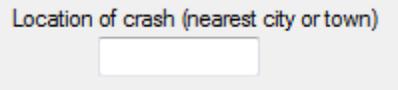


LOCATION OF CRASH (NEAREST CITY OR TOWN)

Figure 195. Element 6.42 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.



Location of crash (nearest city or town)

Figure 196. Element 6.42 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENT 6.43: LOCATION OF CRASH

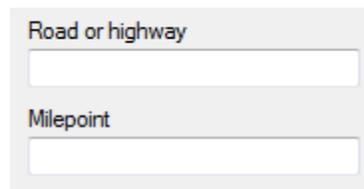
OTAI Paper Form

HIGHWAY AND MILEPOINT/STREET/COUNTY ROAD

Figure 197. Element 6.43 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.



Road or highway

Milepoint

Figure 198. Element 6.43 Online OTAI Form Equivalent

Type of Field

Road or highway: Required.

Milepoint: Optional

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. Form will use validation to only allow integers in the *milepoint* text box. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENT 6.44: DIRECTION OF YOUR VEHICLE

OTAI Paper Form

DIRECTION OF YOUR VEHICLE (CIRCLE)
N S E W

Figure 199. Element 6.44 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.

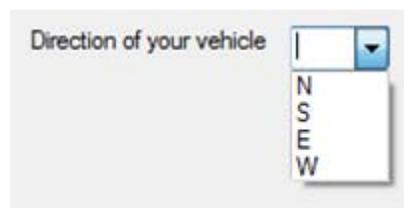
A screenshot of an online form. On the left, the text "Direction of your vehicle" is displayed. To its right is a dropdown menu. The dropdown menu is currently open, showing a list of options: "N", "S", "E", and "W". The dropdown menu has a blue arrow pointing downwards on its top right corner.

Figure 200. Element 6.44 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 6.45, 6.46 AND 6.47: DATE AND TIME OF CRASH

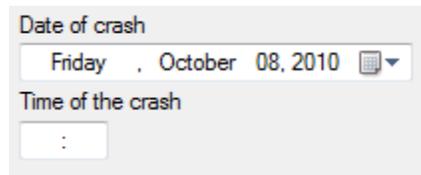
OTAI Paper Form

DATE OF CRASH	TIME	<input type="checkbox"/> AM <input type="checkbox"/> PM	DAY OF THE WEEK (CIRCLE ONE) MON TUES WED THU FRI SAT SUN
---------------	------	--	--

Figure 201. Elements 6.45, 6.46 and 6.47 of the OTAI Paper Form

Online OTAI Form Equivalent

Date time picker and textbox.



The screenshot shows a web form with two sections. The first section is titled "Date of crash" and contains a date picker showing "Friday . October 08, 2010" with a calendar icon and a dropdown arrow. The second section is titled "Time of the crash" and contains a text input field with a colon ":" inside.

Figure 202. Elements 6.45, 6.46 and 6.47 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The Time of the crash field will use validation to only allow 24hour time format input. If validation fails, an error message will be displayed and the element with the error will have border color red. Additionally the button to go to the next form will become disabled.
2. The information will be stored into the database.

ELEMENTS 6.48: CONDITIONS AT TIME OF ACCIDENT

OTAI Paper Form

WEATHER (CIRCLE ONE)	1. CLEAR	2. RAIN	3. SNOW	4. CLOUDY	5. SLEET	6. FOG	7. OTHER _____
ROAD SURFACE (CIRCLE ONE)	1. DRY	2. WET	3. SNOWY	4. ICY	5. OTHER _____		
LIGHT CONDITION (CIRCLE ONE)	1. DAY	2. DAWN	3. DUSK	4. ARTIFICIAL LIGHTS	5. DARK	6. OTHER _____	

Figure 203. Element 6.48 of the OTAI Paper Form

Online OTAI Form Equivalent

Combo boxes and text box.

Conditions at time of accident

Weather Other ▼

Road surface Icy ▼

Light condition Day ▼

Figure 204. Element 6.48 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. If the option *other* is selected for any of the fields, a textbox will appear.
2. The information will be stored into the database.

ELEMENTS 6.49: CONDITIONS AT TIME OF ACCIDENT

OTAI Paper Form

VEHICLES			ACTION	VEHICLES			ACTION	VEHICLES			ACTION
1	2	3		1	2	3		1	2	3	
			SLOWING - STOPPING				PASSING				JACKKNIFE
			STOPPED				CHANGING LANES				OVERTURN
			REAR-END				SIDESWIPE				SEPARATION OF UNITS
			BACKING				HEAD-ON				FIRE
			MAKING RIGHT TURN				SKIDDING				EXPLOSION
			MAKING LEFT TURN				VEHICLE OUT OF CONTROL				CARGO SHIFT
			MAKING U TURN				ROLL-AWAY				CARGO SPILL (HAZARDOUS)
			PROCEEDING STRAIGHT				CONTROLLED RR CROSSING				CARGO SPILL (NON-HAZARDOUS)
			INTERSECTION				UNCONTROLLED RR CROSSING				OTHER (DEER, GUARDRAIL, ETC)
			ENTERING TRAFFIC (FROM SHOULDER, MEDIAN, PARKING STRIP OR PRIVATE DRIVE)				RAN OFF ROAD				

Figure 205. Element 6.49 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box and text box.

Describe the actions of your vehicle

Your vehicle

Actions

<input type="checkbox"/> Slowing - stopping <input type="checkbox"/> Stopped <input type="checkbox"/> Rear end <input type="checkbox"/> Backing <input type="checkbox"/> Making right turn <input type="checkbox"/> Making left turn <input type="checkbox"/> Making U turn <input type="checkbox"/> Proceeding straight <input type="checkbox"/> Intersection <input type="checkbox"/> Passing <input type="checkbox"/> Changing lanes <input type="checkbox"/> Sideswipe <input type="checkbox"/> Head on <input type="checkbox"/> Skidding <input type="checkbox"/> Vehicle out of control	<input type="checkbox"/> Roll away <input type="checkbox"/> Controlled RR crossing <input type="checkbox"/> Uncontrolled RR crossing <input type="checkbox"/> Ran off road <input type="checkbox"/> Jackknife <input type="checkbox"/> Overturn <input type="checkbox"/> Separation of units <input type="checkbox"/> Fire <input type="checkbox"/> Explosion <input type="checkbox"/> Cargo shift <input type="checkbox"/> Cargo spill (hazardous) <input type="checkbox"/> Cargo spill (non hazardous) <input type="checkbox"/> Entering traffic <input checked="" type="checkbox"/> Other
---	---

Figure 206. Element 6.49 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

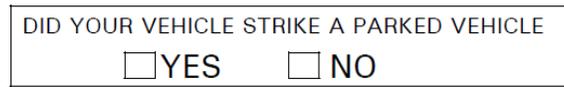
Result of Element

The following will take place when the user presses the button to go to the next page:

1. If the option *other* is selected for any of the fields, a textbox will appear.
2. If there were more drivers involved (Element 6.30) then Element 6.49 will appear for each driver to collect their particular vehicle's information.
3. The information will be stored into the database.

ELEMENTS 6.50: DID YOUR VEHICLE STRIKE A PARKED VEHICLE?

OTAI Paper Form

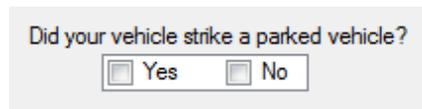


DID YOUR VEHICLE STRIKE A PARKED VEHICLE
 YES NO

Figure 207. Element 6.50 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Did your vehicle strike a parked vehicle?
 Yes No

Figure 208. Element 6.50 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

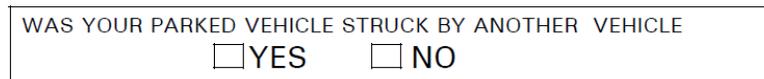
Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENTS 6.51: WAS YOUR PARKED VEHICLE STRUCK BY ANOTHER VEHICLE?

OTAI Paper Form

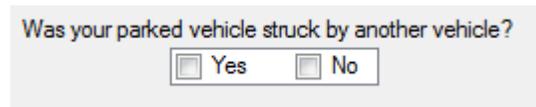


WAS YOUR PARKED VEHICLE STRUCK BY ANOTHER VEHICLE
 YES NO

Figure 209. Element 6.51 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box.



Was your parked vehicle struck by another vehicle?
 Yes No

Figure 210. Element 6.51 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The form will only allow one option to be selected.
2. The information will be stored into the database.

ELEMENTS 6.52: DESCRIPTION OF THE ACCIDENT BY CARRIER OFFICIAL

OTAI Paper Form

DESCRIPTION OF ACCIDENT BY CARRIER OFFICIAL

Figure 211. Element 6.52 of the OTAI Paper Form

Online OTAI Form Equivalent

Multi line text box.

Description of the accident by carrier official

Figure 212. Element 6.52 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 6.53: NAME AND TITLE OF PERSON SIGNING THE REPORT

OTAI Paper Form

NAME AND TITLE OF PERSON SIGNING REPORT

Figure 213. Element 6.53 of the OTAI Paper Form

Online OTAI Form Equivalent

Text boxes.

Title	First name	Mi	Last name
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Figure 214. Element 6.53 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 6.54: TELEPHONE NUMBER

OTAI Paper Form



Figure 215. Element 6.54 of the OTAI Paper Form

Online OTAI Form Equivalent

Text box.

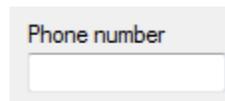


Figure 216. Element 6.54 Online OTAI Form Equivalent

Type of Field

Required.

Data Resources Needed

1. Database where the collected information will be uploaded.

Result of Element

The following will take place when the user presses the button to go to the next page:

1. The information will be stored into the database.

ELEMENTS 6.55 AND 6.56: SIGNATURE AND DATE

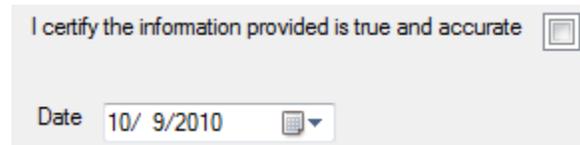
OTAI Paper Form

SIGNATURE I CERTIFY THE INFORMATION PROVIDED IS TRUE AND ACCURATE	DATE
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Figure 217. Elements 6.55 and 6.56 of the OTAI Paper Form

Online OTAI Form Equivalent

Checked list box and date time picker.



I certify the information provided is true and accurate

Date 10/ 9/2010

Figure 218. Elements 6.55 and 6.56 Online OTAI Form Equivalent

FINAL SECTION OF THE ONLINE FORM

In this section the user will be asked to submit the report.