PREPARATION OF THE HOUSE BILL 3624 REPORT

Final Report

SR 500-220
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by

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APPENDICES

APPENDIX A: 2009 FINAL REPORT
APPENDIX B: QUERY
APPENDIX C: DRIVER STATUS CONFIRMATION
1.0 INTRODUCTION

Senate Bill 1080 (2008 Special Session) tightened documentation and identity verification requirements for the issuance, replacement and renewal of Oregon driver licenses, driver permits and identification cards. The law was signed by the Governor on March 11, 2008, and partially implemented on July 1, 2008.

House Bill 3624 (2008 Special Session) requires that a report be prepared annually to describe the fiscal impact of SB 1080 and changes in unlicensed and an insured driving. Specifically the requirements are:

*The Department of Transportation shall prepare and submit an annual report to each regular session of the Legislative Assembly and to the appropriate interim committees of the Legislative Assembly. The report shall describe the effects of the implementation of chapter 1, Oregon Laws 2008 (Enrolled Senate Bill 1080), by including data and analysis on:

(a) The fiscal impact of chapter 1, Oregon Laws 2008 (Enrolled Senate Bill 1080).
(b) Changes in the rates of uninsured drivers in Oregon.
(c) Changes in the rates of unlicensed drivers in Oregon.
(d) Changes in the number of accidents occurring in Oregon, particularly accidents that involve:
   (A) Injuries or fatalities when an uninsured or unlicensed driver is involved; and
   (B) Multiple-passenger accidents related to the transportation of laborers.
(e) Any trends in the information described in paragraphs (a) to (d) of this subsection, as compared to previous reports.*

The Research Section prepared the detailed analysis for the required 2010 report on items (b), (c), and (d). The general research design was to pull data on drivers involved in accidents in July 2007, July 2008, and July 2009. While it is arguable that drivers in accidents are not representative of Oregon drivers, accidents are the principle focus of concern for driver safety and financial responsibility. Accident involvement is of paramount concern in terms of transportation safety policy. Because unlicensed driving is an illegal and covert activity, unlicensed driving comes to light primarily through either accidents or traffic enforcement.

Traffic violations for unlicensed driving do not provide a credible alternative. Because a traffic stop requires probable cause, data based on traffic violations entails selection bias. In addition, the number of violations written for unlicensed driving is also influenced by the overall investment in enforcement, and the priority given by enforcement agencies to traffic enforcement versus other traffic patrol strategies.

July 2007 provides a good “base” period for the analysis because it was prior to implementation of the Governor’s Executive Order and SB 1080. The Executive Order, which included similar requirements to SB 1080, was implemented nearly five months before SB 1080. July was chosen for several reasons. First, this was the month that the most significant changes went into effect in 2008. Second, a single month will yield
between 6,000 to 7,000 accident involvements, which is a sufficient number to yield reliable results. Finally, selecting data from the same month each year will tend to neutralize any seasonal patterns. Since there is a process in place for determining and verifying the insured status of drivers involved in accidents, the information on insurance status is very reliable. By manually reviewing driver records, it was possible to confirm the license status of each driver on the date of the accident.

The ODOT Research Section worked with DMV to select and analyze driver and accident records to determine the rate of unlicensed and uninsured driving in 2007, 2008, and 2009. A data file containing license and insurance information on all drivers in the sample was the basis for the research. Drivers were initially sorted into one of the following four groups based on the best available information about their license and insurance status:

- **Group 1: Licensed and Insured**
- **Group 2: Licensed and Uninsured**
- **Group 3: Unlicensed and Insured**
- **Group 4: Unlicensed and Uninsured**

For purposes of this research, the following definitions were used:

- **Unlicensed**: A resident of Oregon whose license was not valid on the date of the accident. Unlicensed drivers include the following:
  - Never licensed in Oregon
  - License expired, but not suspended, revoked, or cancelled
  - License expired and suspended, revoked, or cancelled
  - License not expired, but suspended, revoked, or cancelled

- **Licensed**: A resident of Oregon who had a valid Oregon driver license on the date of the accident. The license was not suspended, revoked, or cancelled and the license was not expired at the time of the accident.

- **Uninsured**: A driver who received a Code 219 (Uninsured Accident) suspension with an accident reference number matching the date of the accident. Suspensions rescinded or vacated within three months of the accident date are excluded.

Non-resident drivers were eliminated from the sample, as it was not possible to verify license or insurance status. The initial data file showed license status as of the download date. Consequently, driver records for all drivers in Groups 2, 3 and 4 were manually reviewed to confirm license status on the date of the accident. Driver records and accident reports were used to manually confirm insurance status. A check of the driver records for a sample of drivers in Group 1 confirmed that the initial determination of license and insurance status was accurate in more than 99 percent of the cases, so there was no need to manually review the driver record. Based on the data collected from driver files, the final assignment of drivers to each group was made.

The license and insurance status information on each driver was compiled and the results analyzed using the Statistical Package for the Social Sciences (SPSS) software package.
The report that was produced for the 2010 Legislative Assembly is included as Appendix A. The information that follows provides detailed guidance on how the report should be completed for subsequent years.
2.0 COMBINING DATA AND SAMPLE PREPARATION

2.1 MERGING DMV FILES

An initial data query (Appendix B) will be completed by DMV, resulting in an Excel file with three worksheets; a primary worksheet containing the majority of information, a worksheet with “219” (uninsured accident) suspension information, and one with offense information. Figure 2.1 below shows the variables to be contained in each worksheet. The query should be run no earlier than November 1st each year to retrieve data on drivers involved in accidents occurring in July of the current year.

<table>
<thead>
<tr>
<th>Primary</th>
<th>219s</th>
<th>Offenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDLFXD_CUST_ID</td>
<td>TDLFXD_CUST_ID</td>
<td>TDLFXD_CUST_ID</td>
</tr>
<tr>
<td>CNTY_CD</td>
<td>SUSP_REAS</td>
<td>CITE_DATE</td>
</tr>
<tr>
<td>CREATE_DT</td>
<td>SUSP_BEG_DT</td>
<td>OFFNS</td>
</tr>
<tr>
<td>ISS_DT</td>
<td>REF_NO</td>
<td></td>
</tr>
<tr>
<td>EXPIRE_DT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIC_TYPE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCD_DT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCD_REF_NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCD_NOTE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCD_LOC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FATAL_CD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCD_TYPE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.1: Variables contained in each worksheet from DMV data query.

These worksheets need to be combined in order to create a database containing all relevant fields for each driver. This can be done using the SPSS software’s Merge Files function. Each excel worksheet should be opened, sorted by ascending customer ID number (TDLFXD_CUST_ID), and subsequently saved as an individual SPSS file. Once this is done the primary file can be opened and merged with the 219 file using the customer ID field as the unique identifier. The resulting database can then be saved and merged with the offenses file, once again using customer ID as the unique identifier. Once this is completed all variables should now appear together as shown in Figure 2.2.
Once the three files are merged, the data file should be exported into an Excel worksheet. The worksheet should be set up so that there are blank columns for collecting the required information on Accident Severity (if this isn’t available by interpreting the accident type code), License Status, and Insurance Status. A column labeled “Group” should also be added. See Figure 2.3 below.

2.2 MERGING ACCIDENT SEVERITY (FROM CAR UNIT)

While there is a proposed change to the accident type code assigned by DMV which would enable accident severity to be determined as part of the DMV query, currently accident severity is only available in files created by ODOT’s Crash Analysis & Reporting Unit or by manual lookup. To obtain the severity information ask the CAR
Unit to provide a file with the fields shown in Figure 2.4 for July of the year for which you want data.

<table>
<thead>
<tr>
<th>CDS COUNTY CODE</th>
<th>SERIAL #</th>
<th>CRASH DATE</th>
<th>SEVERITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>00159</td>
<td>7/2/2008</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00161</td>
<td>7/5/2008</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00162</td>
<td>7/9/2008</td>
<td>INJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/11/200</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>00163</td>
<td>7/12/200</td>
<td>INJ</td>
</tr>
<tr>
<td>1</td>
<td>00164</td>
<td>7/15/200</td>
<td>INJ</td>
</tr>
<tr>
<td>1</td>
<td>00165</td>
<td>7/19/200</td>
<td>PDO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/20/200</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00166</td>
<td>7/20/200</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00167</td>
<td>7/28/200</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00168</td>
<td>7/30/200</td>
<td>PDO</td>
</tr>
<tr>
<td>1</td>
<td>00169</td>
<td>7/30/200</td>
<td>INJ</td>
</tr>
<tr>
<td>1</td>
<td>00295</td>
<td>7/30/200</td>
<td>INJ</td>
</tr>
<tr>
<td>1</td>
<td>00296</td>
<td>7/30/200</td>
<td>PDO</td>
</tr>
<tr>
<td>2</td>
<td>00452</td>
<td>7/1/2008</td>
<td>PDO</td>
</tr>
<tr>
<td>2</td>
<td>00453</td>
<td>7/1/2008</td>
<td>INJ</td>
</tr>
</tbody>
</table>

Figure 2.4: Example of Data from CAR Unit

You will now need to merge the severity variable into the master file (Example Figure 2.2) that was created in Section 2.1. Because two columns are used for the accident reference number in the CARS file you will need to use the “text to columns” function in Excel to convert the ACCD_REF_NO in the DMV data file to two columns in order to match the data (Figures 2.5 and Figure 2.6).
The two columns are then pasted into Columns B and C of an Excel sheet for sorting. In column A, a numbered column should be created so that at the end of the sort they first
row can be sorted thereby putting things back in the same order enabling them to be matched back up with the master database (Figure 2.7).

You will notice that in Figure 2.7 row 1 Column B has a “7800” and Row C is blank. This is because in Multnomah County no county code precedes the accident number so an adjustment needs to be made by sorting by Column C and wherever they are blank, cutting over the information in Column B and replacing it with inserting the number “26” so the match can be made. Once this is redone they can be resorted back by Column A to ensure original order (Figure 2.8)
Now that the accident reference code is split into two parts, create two new columns in the SPSS master file and paste back in the Excel results. Make sure they are pasted in the file in the same order they were cut out. This can be spot checked by glancing across the rows and making sure your new two row reference number matches the original column reference number. Once this is complete, the severity information variable can be added using the SPSS merge files function using the two column accident reference number as the unique identifier. One problem with this, however, is that because multiple drivers are involved in the same accident some cases will have duplicate accident reference numbers and so SPSS will not want to match them. To get around this run the “Identify Duplicates” function of SPSS on the accident reference number and cut out all duplicates into a new database. Then you can separately merge the new severity variable into each file. An example of this can be found in the attachments labeled “primary” and “duplicate”.

You will also find that some of the entries in the DMV file will not have a match in the CARS file. This is because some accident reports that are recorded by DMV are not sent to CARS for processing. These will need to be looked up manually.

### 2.3 SAMPLE CREATION

The first step is to remove the out-of-state and out-of-country residents. This is done by sorting the list by county code (CNTY_CD) and deleting those drivers who will appear at the bottom who have a CNTY_CD of “60” or “70”. While a few of these drivers may have an unexpired Oregon Driver License (ODL), and could have been retained in the sample, this was not done for 2007 to 2009 so they should be excluded from future years also so the samples are consistent.
Once the nonresident drivers are removed, the remaining drivers can be sorted into four groups. The groups are:

- Group 1: Licensed and Insured
- Group 2: Licensed but Uninsured
- Group 3: Unlicensed but Insured
- Group 4: Unlicensed and Uninsured.

The sort can be accomplished relatively easily by sorting by three variables as follows:

- SUSP_REAS: ascending
- OFFNS: descending
- EXPIRE_DT: ascending

This will put those with a 219 suspension code (uninsured accident) at the top of the list. All drivers with a 219 suspension code will be in Group 4 or 2. Drivers with an entry in the OFFNS column are unlicensed. These drivers should be assigned to Group 4. If the driver does not have an entry in the OFFNS column the group assignment will be determined by the expiration date (EXPIRE_DT) of the driver license. Those drivers with an expiration date prior to the date of the accident should be assigned to Group 4. Those with no expiration date should be assigned to Group 4. All the rest of the drivers with a 219 in the SUSP_REAS column should be assigned to Group 2.

Those without a 219 suspension code will be assigned to Group 3 or 1. Those with an entry in the OFFNS column are unlicensed. These drivers should be assigned to Group 3.

If the driver does not have an entry in the OFFNS column the group assignment should be determined by the expiration date (EXPIRE_DT) of the driver license. Those with an expiration date prior to the date of the accident should be assigned to Group 3. Those with no expiration date should be assigned to Group 3. All the rest of the drivers should be assigned to Group 1.

The group designation should be entered in the column labeled “Group” that should have been entered on the worksheet. The entire file should now be sorted by Group number so that it can be used as a worksheet for the manual look-up required to confirm the license status of the drivers in Groups 2, 3, and 4.
3.0 DATA COLLECTION

The process for collecting data from the driver records and accident reports was developed jointly with staff of ODOT Research and former DMV employees hired to collect the data. It was refined as the project was carried out. The process was documented so that it can be followed when future reports are produced. It is essential that the data be collected in the same way each year. Appendix 6.3 is the Data Collection Guidance Document: Driver Status Confirmation for Annual Report Required for HB 3624.
Once the manual look-ups are completed, the severity, license status, and insurance status columns should be filled in and the entire sheet then exported into SPSS for analysis.

In SPSS it is possible to analyze the data through a crosstabulation of the License Status and Insurance Status variables, which will produce the output shown in Figure 4.1. This data can be used to fill in the tables for the report that are not associated with accident severity.

<table>
<thead>
<tr>
<th>license status</th>
<th>insurance status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>insured</td>
<td>uninsured</td>
</tr>
<tr>
<td>licensed</td>
<td>Count</td>
<td>524</td>
</tr>
<tr>
<td>unlicensed</td>
<td>Count</td>
<td>88</td>
</tr>
<tr>
<td>licensed o/s</td>
<td>Count</td>
<td>141</td>
</tr>
<tr>
<td>na</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>753</td>
</tr>
</tbody>
</table>

Figure 4.1: Crosstabulation of license status and insurance status (highlighted data to be treated as missing)

This data can be used to fill in the first section of Table 5 (Figure 4.2) of the final report. Tables 1-4 of the report are derivatives of Table 5 and therefore, once the calculations for Table 5 are completed, it should be fairly simple to rearrange the data for the other tables. Analysis of the data on accident severity is required to complete the rest of Table 5.
<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Year 2</th>
<th>Change in Rate Year 1 to Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Accidents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fatal and Injury Accidents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Property Damage Only</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.2: Final Report Table 5

### 4.1 ADJUSTING THE TOTAL SAMPLE SIZE

One of the first things that should be done is to calculate an adjusted total sample size. Since out-of-state drivers are not counted in this study they should be counted as missing. Other driver records that should be counted as missing include records that were not found, driver records involving accidents that are not reportable or where the vehicle was a scooter or a segway. The total number of drivers involved in an accident, which includes Group 1, Licensed and Insured, needs to be adjusted by subtracting the number of missing from the total to arrive at an adjusted total.

For example, the crosstabulation presented in Figure 4.1 shows the total number of records as 1164. This crosstabulation was of the records manually looked up for groups 2, 3, and 4 and therefore didn’t include group 1. To get the total for all groups, the original data pull is looked at to determine the total number of drivers. For this example
we will use the 2007 data for which there were 7,037 drivers involved in an accident in July. Therefore the adjusted total would be 7,037 minus 159 out-of-state drivers and 3 “missing” drivers, or 6,875. This number would then be filled in the top section of Year 1 in Table 5 (as shown below).

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Accidents</strong></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6875 (100%)</td>
</tr>
</tbody>
</table>

Figure 4.3: Top section of Table 5 with adjusted total filled in

4.2 CALCULATING PERCENTAGES

To calculate the percentages for all but the licensed, insured category the data from the crosstabulation (Figure 4.1) can be used and divided by the adjusted total. For the licensed, insured category, the total number of licensed and insured drivers found during the initial sorting process (this is Group 1) is used and divided by the adjusted total. The results of these calculations, using the 2007 sample is shown in Figure 4.4.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Accidents</strong></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>6397 (93.0%)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>177 (2.6%)</td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>88 (1.3%)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>213 (3.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>6875 (100%)</td>
</tr>
</tbody>
</table>

Figure 4.4: Completed top portion of Table 5

4.3 DETERMINING THE ACCIDENT SEVERITY FOR GROUPS 2, 3, AND 4

The crosstabulation process is repeated, but with property damage only (PDO) or fatal and injury accidents filtered out. The severity data will likely have to be recoded (depending on how it was recorded). One way of doing this is sorting the severity column
and renaming all fatal accidents “1”, all injury accidents “2”, all PDO accidents “3”, and any unknowns (missing records, non-reportable accidents, etc.) “4”. To run a crosstabulation where only fatal and injury accidents are shown, the Select Cases function of SPSS can be used. If using the codes suggested, the function showing the selection of only fatal and injury accidents is shown in Figure 4.5.

![Figure 4.5: Example of how to select for Fatal and Injury Accidents - ANY(severity,1,2)](image)

To select for PDO accidents the function is shown in Figure 4.6.

![Figure 4.6: Example of how to select for Fatal and Injury Accidents – severity=3](image)

Figure 4.7 is an example of the crosstabulation output, after property damage only accidents have been filtered out. This is repeated, selecting only property damage accidents (Figure 4.8). This information can then be used to fill in more of Table 5 in the report (Figure 4.9). Note that the licensed, insured categories and the total categories (highlighted) are not filled in.
<table>
<thead>
<tr>
<th>License Status (accd_dt)</th>
<th>Insured</th>
<th>Uninsured</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed</td>
<td>288</td>
<td>134</td>
<td>0</td>
<td>422</td>
</tr>
<tr>
<td>Unlicensed</td>
<td>57</td>
<td>144</td>
<td>0</td>
<td>201</td>
</tr>
<tr>
<td>Licensed O/S</td>
<td>83</td>
<td>13</td>
<td>0</td>
<td>96</td>
</tr>
<tr>
<td>na</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>428</td>
<td>291</td>
<td>2</td>
<td>721</td>
</tr>
</tbody>
</table>

Figure 4.7: No PDO Crosstabulation Results

<table>
<thead>
<tr>
<th>License Status (accd_dt)</th>
<th>Insured</th>
<th>Uninsured</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed</td>
<td>236</td>
<td>43</td>
<td>279</td>
</tr>
<tr>
<td>Unlicensed</td>
<td>31</td>
<td>69</td>
<td>100</td>
</tr>
<tr>
<td>Licensed O/S</td>
<td>58</td>
<td>5</td>
<td>63</td>
</tr>
<tr>
<td>na</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>325</td>
<td>118</td>
<td>443</td>
</tr>
</tbody>
</table>

Figure 4.8: Only PDO Crosstabulation Results
Figure 4.9: Table 5 filled in with filtered crosstabulation data

### 4.4 DETERMINING THE ACCIDENT SEVERITY FOR GROUP 1

The accident severity information for licensed, insured drivers (Group 1) in the 2009 sample was not provided in the report to the legislature. The data for Group 1 for 2007 and 2008 was derived by matching (using the accident reference number) the DMV data to data on crash severity provided in a file produced by ODOT’s Crash Analysis and Reporting Unit (CARS). Since this data is not processed until the middle of the following year it was not available for the 2009 sample. To get the 2009 data for Group 1 would have required looking up each accident report filed. The cost associated with doing this for the 6,000+ cases in Group 1 would have been extremely high plus there was not sufficient time.

The data on crash severity for the 2009 Group 1 sample can be generated in mid-2010. (See Appendix 6.4) Severity information for about 70% of the cases is available through CARS. This is done by matching the CARS data with the Group 1 sample created from the DMV query and using the **Merge Files** function in SPSS. The accident reference number (ACCD_REF_NO) is the unique identifier. The reference number needs to be reformatted in order to perform the match. Then using the approximately 70% match as a sample, it is possible to determine the severity information for the entire Group 1
population. (Manual look ups of severity information for group 1 in 2007 were compared with data from the CARS unit and there was found to be no significant difference.)

ODOT Research has recommended that the accident type code be revised to include accident severity information so the severity of accidents can be determined without a manual look-up and all the data required to provide a complete report to the Legislature will be available within the requested reporting timeframe.

If the accident-type code is not revised it will be necessary to look up the severity of the accidents that occurred in July 2010 in which drivers in Groups 2, 3, 4 were involved. This is can be done at the same time license and insurance status information is verified using the same approach as 2009.

4.5 DETERMINING THE SIGNIFICANCE OF CHANGES

Once the percentages for the year have been calculated, they can be compared to the previous years, and the rate of change calculated. This rate can then be tested for significance by using a **Chi-square statistical test**. In the test, the earlier year will serve as the expected value and the current year will serve as the observed value. The rates of change with a Chi-square Alpha value of .05 or less are considered significant and are placed in bold type in the tables.

With Table 5 completed, the other tables can be completed by simply rearranging the data.

4.6 REPORT PREPARATION

Once the tables are prepared they need to be compiled in a report with observations and conclusions added. The format used in the 2010 report should be followed.
APPENDIX A: 2009 FINAL REPORT
HOUSE BILL 3624 REPORT
REPORT ON IMPLEMENTATION OF SENATE BILL 1080

Standards for Issuance of
Oregon Driver Licenses and Identification Cards

Tom McClellan, DMV Administrator

December 17, 2009
Background

Senate Bill 1080 (2008 Supplemental Session) tightened documentation and identity verification requirements for the issuance, replacement and renewal of Oregon driver licenses, driver permits and identification cards. The law was signed by the Governor on March 11, 2008, and partially implemented on July 1, 2008.

Governor Kulongoski’s Executive Order No. 07-22 imposed similar requirements when it was implemented nearly five months earlier, on February 4, 2008. The executive order directed DMV to tighten identity requirements and verify the social security number (SSN) of applicants. Although the executive order did not require proof of United States (U.S.) citizenship or legal presence, applicants who did not have a verifiable SSN were required to submit U.S.-issued identity documents such as a U.S. passport or U.S. immigration document with a valid foreign passport. The executive order had minimal impact on U.S. citizens, but significantly impacted non-citizens who did not possess a valid SSN since U.S. immigration documents were required. As a result, many applicants who were not legally in the United States were unable to receive a driver license or ID card as of February 2008.

SB 1080 put provisions of the executive order into statute, expanded the new requirements to all applicants, and added some additional requirements. The new law applies to everyone who applies for a driver license or ID card, no matter who they are, how long they have had an Oregon license, or how long they have lived in the state.

As required by SB 1080, the Department implemented the bill in three phases:

- Phase 1 required the presentation of documents proving legal presence, SSN and full legal name (implemented on July 1, 2008)
- Phase 2 required the verification of legal presence documents using the federal Systematic Alien Verification for Entitlements (SAVE) program (implemented on January 1, 2009)
- Phase 3 will require the issuance of limited term cards that expire when immigration documents expire (to be implemented on January 1, 2010).

This report was prepared in accordance with House Bill 3624 (2008 Special Session), which requires that:

The Department of Transportation shall prepare and submit an annual report to each regular session of the Legislative Assembly and to the appropriate interim committees of the Legislative Assembly. The report shall describe the effects of the implementation of chapter 1, Oregon Laws 2008 (Enrolled Senate Bill 1080), by including data and analysis on:

(a) The fiscal impact of chapter 1, Oregon Laws 2008 (Enrolled Senate Bill 1080).

(b) Changes in the rates of uninsured drivers in Oregon.

(c) Changes in the rates of unlicensed drivers in Oregon.

(d) Changes in the number of accidents occurring in Oregon, particularly accidents that involve:

(A) Injuries or fatalities when an uninsured or unlicensed driver is involved; and

(B) Multiple-passenger accidents related to the transportation of laborers.

(e) Any trends in the information described in paragraphs (a) to (d) of this subsection, as compared to previous reports.
**Fiscal Impact**

DMV is implementing SB 1080 in three phases over an 18-month period. The cost to implement SB 1080 has been approximately $765,000 through November 2009. Some additional costs remain to complete the final phase of implementation on January 1, 2010. Approximately 75% of the implementation cost has been funded by a Department of Homeland Security grant.

Following is a summary of the fiscal impact of each phase of the implementation.

**Phase 1:** Effective July 1, 2008, SB 1080 required applicants to provide proof of legal presence, SSN and full legal name in order to obtain an original, renewal or replacement driver license, driver permit or identification card. The law also required DMV to electronically verify SSNs (electronic SSN verification was implemented on February 4, 2008, as required by Executive Order 07-22). SB 1080 also allowed the Department to renew or replace licenses and ID cards using a previous photo from the DMV database for individuals who were out-of-state and unable to come to a DMV office. The cost to implement Phase 1 was approximately $175,000.

**Phase 2:** DMV began verifying immigration documents electronically on January 1, 2009. The SAVE system allows DMV to verify the validity of immigration status prior to issuing driver licenses, driver permits, and ID cards. Inclusion of a legal presence indicator on the customer record enables U.S. citizens and permanent legal residents to obtain future renewal or replacement licenses, permits and ID cards without submitting legal presence documents again. The cost to implement Phase 2 was approximately $220,000. DMV secured a grant from the federal Department of Homeland Security to cover this cost in full.

**Phase 3:** Beginning January 1, 2010, DMV will issue limited term driver licenses, permits and ID cards to applicants with limited approved stays in the United States. Limited term cards will expire on the ending date of the customer’s approved stay in the United States, or sooner if the regular expiration period for the privilege is less than the customer’s approved length of stay. Customers who have an indefinite length of stay will receive a card that is valid for one year. SB 1080 specifies fees for the limited term cards that are lower than the fees charged for cards with a standard eight-year expiration period. The cost to implement Phase 3 has been about $370,000 through the end of November 2009. Some additional costs will be incurred before implementation is completed on January 1, 2010. All costs to implement Phase 3 have been funded by a grant from the Department of Homeland Security.

**Changes in the Rates of Unlicensed and Uninsured Driving and the Number of Accidents**

House Bill 3624 requires the Department to present annual reports to the Legislature on changes in the rates of unlicensed drivers, uninsured drivers, accidents involving
unlicensed or uninsured drivers, particularly those that involve injuries or fatalities, and multiple passenger accidents related to the transport of laborers\(^1\).

Due to Oregon’s eight-year driver license renewal period, it is expected that an increasing number of drivers will be unable to renew their driver license because they no longer qualify under the new requirements of SB 1080. As a result, any change in the rate of uninsured or unlicensed drivers and in the number of accidents will most likely be gradual over an eight-year period. However, it is likely that factors other than the new requirements of SB 1080 may also affect the number of unlicensed and uninsured drivers and the number of accidents. These factors include the recent recession, an increase in the price of gasoline, and the high unemployment rate in Oregon.

**Changes in the Rates of Uninsured and Unlicensed Driving:** The general research design was to pull data on drivers involved in accidents in July 2007, July 2008, and July 2009. While it is arguable that drivers in accidents are not representative of Oregon drivers, accidents are the principle focus of concern for driver safety and financial responsibility. Accident involvement is of paramount concern in terms of transportation safety policy. Because unlicensed driving is an illegal and covert activity, unlicensed driving comes to light primarily through either accidents or traffic enforcement.

Traffic violations for unlicensed driving do not provide a credible alternative. Because a traffic stop requires probable cause, data based on traffic violations entails selection bias. In addition, the number of violations written for unlicensed driving is also influenced by the overall investment in enforcement, and the priority given by enforcement agencies to traffic enforcement versus other traffic patrol strategies.

July 2007 provides a good “base” period for the analysis because it was prior to implementation of the Governor’s Executive Order and SB 1080. The Executive Order, which included similar requirements to SB 1080, was implemented nearly five months before SB 1080. July was chosen for several reasons. First, this was the month that the most significant changes went into effect in 2008. Second, a single month will yield between 6,000 to 7,000 accident involvements, which is a sufficient number to yield reliable results. Finally, selecting data from the same month each year will tend to neutralize any seasonal patterns. Since there is a process in place for determining and verifying the insured status of drivers involved in accidents, the information on insurance status is very reliable. By manually reviewing driver records, it was possible to confirm the license status of each driver on the date of the accident.

The ODOT Research Section worked with DMV to select and analyze driver and accident records to determine the rate of unlicensed and uninsured driving in 2007, 2008, and 2009. A data file containing license and insurance information on all drivers in the sample was the basis for the research. Drivers were initially sorted into one of the following four groups based on the best available information about their license and insurance status:

- **Group 1:** Licensed and Insured

\(^1\)Data on multiple passenger accidents involving the transport of laborers cannot be reported because the employment status of passengers is not recorded on accident reports.
• Group 2: Licensed and Uninsured
• Group 3: Unlicensed and Insured
• Group 4: Unlicensed and Uninsured

For purposes of this research, the following definitions were used:

• **Unlicensed**: A resident of Oregon whose license was not valid on the date of the accident. Unlicensed drivers include the following:
  - Never licensed in Oregon
  - License expired, but not suspended, revoked, or cancelled
  - License expired and suspended, revoked, or cancelled
  - License not expired, but suspended, revoked, or cancelled

• **Licensed**: A resident of Oregon who had a valid Oregon driver license on the date of the accident. The license was not suspended, revoked, or cancelled and the license was not expired at the time of the accident.

• **Uninsured**: A driver who received a Code 219 (Uninsured Accident) suspension with an accident reference number matching the date of the accident. Suspensions rescinded or vacated within three months of the accident date are excluded.

Non-resident drivers were eliminated from the sample, as it was not possible to verify license or insurance status. The initial data file showed license status as of the download date. Consequently, driver records for all drivers in Groups 2, 3 and 4 were manually reviewed to confirm license status on the date of the accident. Driver records and accident reports were used to manually confirm insurance status. A check of the driver records for a sample of drivers in Group 1 confirmed that the initial determination of license and insurance status was accurate in more than 99 percent of the cases, so there was no need to manually review the driver record. Based on the data collected from driver files, the final assignment of drivers to each group was made.

The license and insurance status information on each driver was compiled and the results analyzed. Table I presents the total number and percent for each group. Also included in the table are changes in each rate between 2007 and 2008 and for the two years between 2007 and 2009.
### Table I: Rate of Unlicensed and Uninsured Driving in Oregon, July 2007, 2008 and 2009

<table>
<thead>
<tr>
<th>Licensed/Insured Status</th>
<th>2007</th>
<th>2008</th>
<th>Change in Rate 2007 to 2008*</th>
<th>2009</th>
<th>Change in Rate 2007 to 2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>6397 (93.0%)</td>
<td>5606 (93.5%)</td>
<td>0.5%(+)</td>
<td>5675 (91.9%)</td>
<td>1.1%(-)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>177 (2.6%)</td>
<td>168 (2.8%)</td>
<td>0.2%(+)</td>
<td>247 (4.0%)</td>
<td>1.4%(+)</td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>88 (1.3%)</td>
<td>78 (1.3%)</td>
<td>0%</td>
<td>64 (1.0%)</td>
<td>0.3%(-)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>213 (3.1%)</td>
<td>144 (2.4%)</td>
<td>0.7%(-)</td>
<td>193 (3.1%)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>6875 (100%)</td>
<td>5996 (100%)</td>
<td></td>
<td>6179 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Oregon Department of Transportation, Driver and Motor Vehicle Services

Notes:
- License status was determined by reviewing the driver records of all drivers involved in an accident that was reported to DMV to determine license status at the time of the accident.
- Insured status was determined by reviewing the driver records of all persons involved in an accident that was reported to DMV and determining if the driver received a suspension for an uninsured accident with an accident reference number matching the date of the accident.

* Rates of change shown in **boldfaced type** are significant at the .05 level

The data in Table I was used to develop three tables that highlight specific relationships in the results (Tables II-IV).

### Table II: Relationship of License Status

<table>
<thead>
<tr>
<th>License Status</th>
<th>2007</th>
<th>2007 (%)</th>
<th>2008</th>
<th>2008 (%)</th>
<th>2009</th>
<th>2009 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed</td>
<td>6574</td>
<td>95.6%</td>
<td>5774</td>
<td>96.3%</td>
<td>5922</td>
<td>95.9%</td>
</tr>
<tr>
<td>Unlicensed</td>
<td>301</td>
<td>4.4%</td>
<td>220</td>
<td>3.7%</td>
<td>256</td>
<td>4.1%</td>
</tr>
<tr>
<td>Total</td>
<td>6875</td>
<td>100.0%</td>
<td>5994</td>
<td>100.0%</td>
<td>6178</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

From this we can conclude that unlicensed driving declined in both 2008 and 2009, compared to 2007.

### Table III: Relationship of Insured Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insured</td>
<td>6485</td>
<td>94.3%</td>
<td>5682</td>
<td>94.8%</td>
<td>5738</td>
<td>92.9%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>390</td>
<td>5.7%</td>
<td>312</td>
<td>5.2%</td>
<td>440</td>
<td>7.1%</td>
</tr>
<tr>
<td>Total</td>
<td>6875</td>
<td>100.0%</td>
<td>5994</td>
<td>100.0%</td>
<td>6178</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

From this we can conclude that uninsured driving (based on accidents) decreased in 2008 but then increased in 2009.
Table IV: Relationship of Insured Status and License Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insured</td>
<td>6485</td>
<td>94.3%</td>
<td>5682</td>
<td>94.8%</td>
<td>5738</td>
<td>92.9%</td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed</td>
<td>177</td>
<td>2.6%</td>
<td>168</td>
<td>2.8%</td>
<td>247</td>
<td>4.0%</td>
</tr>
<tr>
<td>Unlicensed</td>
<td>213</td>
<td>3.1%</td>
<td>144</td>
<td>2.4%</td>
<td>193</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>6875</td>
<td>100.0%</td>
<td>5994</td>
<td>100.0%</td>
<td>6178</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

From this we can conclude that the increase in uninsured accidents is concentrated among licensed drivers, and that the percent of drivers in accidents who are both unlicensed and uninsured is not increasing.

In short, there is no evidence that unlicensed driving is increasing and that while uninsured driving spiked in 2009, the increase is not associated with unlicensed driving, and is more likely the result of a weak economy.

Unlicensed and Uninsured Drivers and Severity of Accidents: The Oregon Legislature asked ODOT to report annually on changes in the number of unlicensed and uninsured drivers involved in accidents in Oregon. Specific information on the number of unlicensed and uninsured drivers involved in fatal and injury accidents was requested.

Accident reports filed by drivers involved in accidents occurring in July of 2007, 2008, and 2009 or by police officers investigating an accident were the basis for determining the severity of each accident. This information was obtained for the drivers in the same sample as described above, either by matching the accident by reference number to data in the Statewide Crash Data System, or by reviewing the actual accident reports filed. Due to the reporting timeline, information about the severity of accidents occurring in July 2009 was collected manually. Because of this constraint, accident severity information was collected only for drivers that were unlicensed and/or uninsured and not for the large group of licensed, insured drivers.

The Research Section used the accident severity information to determine the number of drivers, by license and insurance status, involved in fatal, injury and property damage accidents. The results of this analysis are presented in Table V. Also included are changes in each rate of involvement between 2007 and 2008 and, where the data was available, for the two years between 2007 and 2009.

Several interesting observations can be drawn from Table V. First, the increase in drivers who are licensed but uninsured is evident in both property damage and injury accidents. Otherwise there are no notable changes from 2007 to 2008. Second, unlicensed and uninsured drivers are disproportionately involved in the more serious fatal and injury accidents, regardless of year. However, at this point there is no reason to conclude that this trend will persist if unlicensed or uninsured rates rise due to de-licensing.

New requirements for driver licensing have been in effect since July 2008, but the full impact of the change will may not be evident until 2016 because Oregon has an eight-
year driver license renewal cycle. Consequently, it is not possible to draw definitive conclusions on the law’s impact on the number of accidents involving an unlicensed or uninsured driver.

Table V: Unlicensed and Uninsured Drivers Involved in Accidents by Severity, July 2007, 2008, and 2009

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>Change in Rate 2007 to 2008*</th>
<th>2009</th>
<th>Change in Rate 2007 to 2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>6397 (93.0%)</td>
<td>5606 (93.5%)</td>
<td>0.5%(+)</td>
<td>5675 (91.9%)</td>
<td>1.1%(-)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>177 (2.6%)</td>
<td>168 (2.8%)</td>
<td>0.2%(+)</td>
<td>247 (4.0%)</td>
<td>1.4%(+)</td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>88 (1.3%)</td>
<td>78 (1.3%)</td>
<td>0%</td>
<td>64 (1.0%)</td>
<td>0.3%(-)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>213 (3.1%)</td>
<td>144 (2.4%)</td>
<td>0.7%(-)</td>
<td>193 (3.1%)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>6875 (100%)</td>
<td>5996(100%)</td>
<td></td>
<td>6179 (100%)</td>
<td></td>
</tr>
<tr>
<td>Fatal and Injury Accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>2994 (89.9%)</td>
<td>2022 (88.5%)</td>
<td>1.4%(-)</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Uninsured</td>
<td>134 (4.2%)</td>
<td>118 (5.2%)</td>
<td>1.0%(+)</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>57 (1.7%)</td>
<td>49 (2.1%)</td>
<td>0.4%(-)</td>
<td>44</td>
<td>**</td>
</tr>
<tr>
<td>Uninsured</td>
<td>144 (4.3%)</td>
<td>95 (4.2%)</td>
<td>0.1%(-)</td>
<td>128</td>
<td>**</td>
</tr>
<tr>
<td>Total</td>
<td>3329 (100%)</td>
<td>2284 (100%)</td>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Property Damage Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured***</td>
<td>1908 (93.0%)</td>
<td>1616 (92.7%)</td>
<td>0.3%(-)</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Uninsured</td>
<td>43 (2.1%)</td>
<td>50 (2.9%)</td>
<td>0.8%(+)</td>
<td>74</td>
<td>**</td>
</tr>
<tr>
<td>Unlicensed Drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>31(1.5%)</td>
<td>29 (1.7%)</td>
<td>0.2%(+)</td>
<td>20</td>
<td>**</td>
</tr>
<tr>
<td>Uninsured</td>
<td>69 (3.4%)</td>
<td>49 (2.8%)</td>
<td>0.6%(-)</td>
<td>65</td>
<td>**</td>
</tr>
<tr>
<td>Total</td>
<td>2051(100%)</td>
<td>1744 (100%)</td>
<td></td>
<td>**</td>
<td></td>
</tr>
</tbody>
</table>

Source: Oregon Department of Transportation, Driver and Motor Vehicle Services and Statewide Crash Data System

Notes:
- License status was determined by reviewing the driver record of all drivers involved in an accident that was reported to DMV to determine license status at the time of the accident.
- Insured status was determined by reviewing the driver record of all persons involved in an accident that was reported to DMV and determining if the driver received a suspension for an uninsured accident with an accident reference number consistent with the date of the accident.

*rates of change shown in boldfaced type are significant at the .05 level.
**data unavailable
***crash severity frequencies for insured, licensed drivers were projected from a sample, rather than manually reviewing thousands of accident reports.
Conclusions

Senate Bill 1080 tightened documentation and identity verification requirements for the issuance of Oregon driver licenses and ID cards. The new law impacts everyone who applies for a driver license or ID card. Implementation began in July 2008 and will be completed on January 1, 2010. Due to Oregon’s eight-year renewal cycle, it is likely that an increasing number of drivers will be unable to renew their driver license because they no longer qualify under the requirements of SB 1080. As a result, it is expected that any change in the rate of uninsured or unlicensed drivers and in the number of accidents will be gradual over an eight-year period.

The fiscal cost to implement SB 1080 has been approximately $765,000. Some additional costs remain before completion of the final phase of implementation on January 1, 2010. Approximately 75% of the implementation cost has been funded by a grant from the Department of Homeland Security.

The results of the analysis of data from before and after changes in driver licensing requirements occurred show no apparent impact on unlicensed and uninsured driving. Due to the fact that driver licenses are now issued for eight years, relatively few drivers have been affected by the law. As more drivers are unable to obtain an original driver license or renew their driver license due to additional identification requirements, the effects of the law on unlicensed and uninsured driving will become clearer.

The increase in driving uninsured is most likely explained by poor economic conditions that have led to drivers not being able to afford auto insurance.
APPENDIX B: QUERY
Three queries were run to create data files required for the research. The content of the queries was determined following several meetings between Research and DMV staff in which the definitions of unlicensed and uninsured drivers were determined.

This one for all drivers involved in an accident

```sql
SELECT V.TDLFXD_CUST_ID, F.CNTY_CD, F.ORIG_BUSNS_DT as CREATE_DT, F.ISS_DT, F.EXPIRE_DT, F.LIC_TYPE_1 AS LIC_TYPE,
      V.SEG_DT AS ACCD_DT, V.CH02_18 AS ACCD_REF_NO, V.CH03_05 AS ACCD_NOTE, V.CH05_36 as ACCD_LOC, V.CH06_01 AS FATAL_CD,
      V.CH08_01 AS ACCD_TYPE
FROM MPROD1.TDLFXD F,
     MPROD1.TDLVAR V,
     MPROD1.TCUS01 T
WHERE F.CUST_ID=V.TDLFXD_CUST_ID
  AND T.CUST_ID=F.CUST_ID
  AND T.CUST_ID=V.TDLFXD_CUST_ID
  AND F.DELETE_FLG = 'N'
  AND V.DELETE_FLG = 'N'
  AND V.SEG_CD = 05
  AND V.SEG_DT BETWEEN '07/01/2009' AND '07/31/2009'
  AND (CURRENT_DATE NOT BETWEEN T.ADDR_CONF_EFF_DT AND T.ADDR_CONF_EXP_DT OR T.ADDR_CONF_EFF_DT IS NULL)
  AND NOT EXISTS
    (SELECT *
     FROM MPROD1.TDLVAR V1
     WHERE V.TDLFXD_CUST_ID=V1.TDLFXD_CUST_ID
       AND V1.DELETE_FLG = 'N'
       AND V1.SEG_CD = 05
       AND V1.CH03_05 = 'NRT')
```

2. This one is for drivers with an accident and an associated 219 suspension.

```sql
SELECT V.TDLFXD_CUST_ID, V1.NUM01_05 as SUSP_REAS, V1.SEG_DT AS SUSP_BEG_DT, V1.CH02_18 AS REF_NO
FROM MPROD1.TDLVAR V,
     MPROD1.TDLVAR V1,
     MPROD1.TCUS01 T
WHERE V.TDLFXD_CUST_ID=V1.TDLFXD_CUST_ID
  AND V1.DELETE_FLG = 'N'
  AND V1.SEG_CD = 05
  AND V1.CH03_05 = 'NRT'
```
AND V1.CH02_18 = V.CH02_18
AND (CURRENT_DATE NOT BETWEEN T.ADDR_CONF_EFF_DT AND
     T.ADDR_CONF_EXP_DT OR T.ADDR_CONF_EFF_DT IS NULL)
AND NOT EXISTS
  (SELECT *
   FROM MPROD1.TDLVAR V2
   WHERE V.TDLFXD_CUST_ID=V2.TDLFXD_CUST_ID
   AND V1.TDLFXD_CUST_ID=V2.TDLFXD_CUST_ID
   AND V2.DELETE_FLG = 'N'
   AND V2.SEG_CD = 05
   AND V2.CH03_05 = 'NRT')

3. This one is for drivers with certain types of convictions associated with the accident:

SELECT   A.TDLFXD_CUST_ID, A.SEG_DT AS CITE_DATE, B.CH05_36 AS OFFNS
FROM     MPROD1.TDLVAR A,
          MPROD1.TDLVAR B,
          MPROD1.TCUS01 T
WHERE    A.TDLFXD_CUST_ID=B.TDLFXD_CUST_ID
AND T.CUST_ID=A.TDLFXD_CUST_ID
AND T.CUST_ID=B.TDLFXD_CUST_ID
AND A.DELETE_FLG = 'N'
AND B.DELETE_FLG = 'N'
AND A.SEG_CD = 05
AND A.SEG_DT BETWEEN '07/01/2009' AND '07/31/2009'
AND B.SEG_CD = 01
AND B.CH05_36 IN ('DWR','DWR-VC','DWR-VI','DWS','DWS-VC','DWS-VI','OP
VH N DL','USE OTHER DL','USE INV DL')
AND A.SEG_DT = B.DT01
AND (CURRENT_DATE NOT BETWEEN T.ADDR_CONF_EFF_DT AND
     T.ADDR_CONF_EXP_DT OR T.ADDR_CONF_EFF_DT IS NULL)
AND NOT EXISTS
  (SELECT *
   FROM MPROD1.TDLVAR V1
   WHERE A.TDLFXD_CUST_ID=V1.TDLFXD_CUST_ID
   AND B.TDLFXD_CUST_ID=V1.TDLFXD_CUST_ID
   AND V1.DELETE_FLG = 'N'
   AND V1.SEG_CD = 05
   AND V1.CH03_05 = 'NRT')
GROUP BY A.TDLFXD_CUST_ID, A.SEG_DT, B.CH05_36
APPENDIX C:
DRIVER STATUS CONFIRMATION FOR ANNUAL REPORT REQUIRED
FOR HB 3624
HB 3624 establishes specific reporting requirements regarding the effects of implementing Chapter 1, Oregon Laws 2008 (Enrolled Senate Bill 1080). To prepare the report each year it is necessary to confirm license and insurance status of drivers involved in an accident in July of the relevant year and also to determine the severity of the accident. To do this driver records and accident reports must be accessed and the license and insurance status on the date of the accident determined based on information available.

You are starting with a list of drivers involved in accidents in July of a particular year. The list was generated by a query written by DMV that pulled relevant information from the files of drivers involved in an accident. Drivers with CNTY_ID of “60” or “70” will have been removed. These are drivers with out-of-state or out-of-country addresses. Since they are not Oregon drivers they are not included in the study. Based on the information the drivers have been sorted into groups. Since the group assignment is based on information from a recent download of information it may not represent what the license and insurance status was on the date of the accident.

The groups used were as follows:
Group 1: Licensed and Insured
Group 2: Licensed but Uninsured
Group 3: Unlicensed but Insured
Group 4: Unlicensed and Uninsured

The records of all persons in Groups 2, 3, and 4 need to be pulled and for each one the following needs to be determined:
1. License status on the date of the accident
2. Insurance status for those in Group 3. Drivers were placed in Group 2 or 4 on the basis of having a 219 suspension. This information alone is considered to be accurate and sufficient to determine insurance status.
3. Severity of the crash based on information on the accident report. (For the early years of the study the crash severity information was available from the crash data system on some of the accidents, but that will not be the case when the data is pulled each November for the report due to the OTC in December.)

LICENSE STATUS

If there is an entry in the OFFENS column that shows DWS or OP VH N DL, enter “Unlicensed” in the License Status column.

If the expiration date precedes the date of the accident

Check the accident file to see if the person had an out-of-state (O/S) license. You can do this by looking at the police report or any individual reports in the file. If the file shows an O/S license then indicate “O/S” and the two digit state code in the License Status column. (We have no way to verify if an O/S driver had valid driving privileges in their state, so the assumption is that they are currently licensed in that State and their driving privileges were valid at the time of the
Check the driver record to make sure the person was not suspended in Oregon prior to the accident. If they were, enter “Unlicensed” in the License Status column.

**If there is no expiration date (00/00/00).**

If there is an issuance date (ISS_DT) and no expiration date (EXPIRE_DT) you need to determine why.

- If the person left Oregon and received a license in another State, most states will return the Oregon license to DMV. When this happens a segment is placed on the record to show when the license was returned and by what state. This causes the expiration date to zero out. If the license was returned prior to the accident date, you will want to look at any reports in the file to determine if the person is listed as having an out-of-state license. If so, enter “O/S” and the two-digit state code in the License Status column.

- If the segment was placed on the driver record after the accident occurred, then you need to determine if the person had valid driving privileges at the time of the accident. Start with the last issuance segment you see prior to the accident date. Using the SM03 program you can determine what type of license was issued. For example a “JD1” is an 8 year renew class C license. You have to look at the issue date on the front page of the record and then count 8 years forward. The license would have expired on the person’s birth date 8 years from the issue date. If you determine that at the time of the accident they should have had valid driving privileges then in the License Status column put “Licensed”. If you find they were not licensed enter “Unlicensed”.

- When a person’s driving privileges have been revoked at some point in time this causes the expiration date to be zeroed out. If this revocation happened after the accident, then it’s possible the person would have had valid driving privileges at the time of the accident. You need to review page one to see if a license was ever issued. You need to look at the issuance segments prior to the accident to see what was issued. You may need to use the SM03 screen to determine this. You also need to look at any suspensions and whether or not they were reinstated and when. Depending on what you see, you will enter “Licensed” or “Unlicensed” in the License Status Column.

If there is no issuance date and no expiration date the person was never issued a license in Oregon. Check the accident reports to see the person has a license issued in another state. If so, enter “O/S” and the state code in the License Status column.

**If there is an expiration date that is after the accident occurred.**

If there is an issuance date and the expiration date is after the date of the accident you are confirming that there is nothing on the driver record that would indicate that the Oregon driver license was not current at the time of the accident. Review the record for the last driver license issuance date. Instruction permits and provisional licenses are considered licenses; identification
cards are not. (The printout you are working from does not include issuance and expiration information for identification cards.)

**If a drivers license or insurance is not required.**

There are times when a person is driving a vehicle that doesn’t require a driver’s license or insurance. An example would be a motor scooter. Enter N/A in the license and insurance status and indicated what the person was driving.

**INSURANCE STATUS**

If the person has a “219” in the SUSP_REAS column the person is considered “Uninsured”. If there is no “219” the person is considered “Insured”. Since we are relying on this entry, insurance status does not need to be checked except for group 3.

For group 3 you will need to determine if the person was insured by looking at the person’s individual accident report. Next to the insurance information you should see initials of the person who verified the insurance or you may see the person’s initials and a “T”. The “T” means that an insurance tab was sent to the insurance company for verification. Since the insurance tab was never returned, the assumption is that the person was insured. Tabs are mostly sent out because the vehicle is registered out of state and we are not able to verify insurance information on the vehicle.

If you see an insurance tab on the top of the file, you will need to review it to determine if it relates to the person whose driving record you are looking at. If so, look at the driving record to see if there is an open accident uninsured suspension (219) with a file reference number matching your file number. If so, then the person was uninsured at the time of the accident.

You may also see blue highlighting in the insurance area. This means the person was uninsured at the time of the accident.

**ACCIDENT SEVERITY**

If you are working on a list of drivers involved in an accident during the current year, the accident reports will not have been processed by the CARS unit. You will need to determine the severity of the accident by looking at the accident reports. Fatal accidents are clearly identified. If it is a fatal accident enter “FAT” in the Severity column. If any report filed by a driver or the police shows any kind of injury enter “INJ” in the Severity column. Enter “PDO” in the Severity column for all other cases. While in most cases the information found in the reports will be consistent with the information on the coversheet where it says “Reason Reportable”, the information on the accident reports is more reliable and should be used.

A copy of a completed data collection sheet and sample driver records and accident reports on where to find the information is in the file.