Fatality Reduction Plan

Certified Public Manager Project
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South Carolina Department of Public Safety
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PROBLEM STATEMENT:

The mission of the South Carolina Highway Patrol (SCHP) is to provide equitable service and protection, uphold the laws of the constitutions of the United States and The State of South Carolina in order to promote a safe and secure environment for the public (SCHP Website, homepage). This mission is accomplished through several objectives, however, the primary objective is the effective and efficient management of all allocated resources in an effort to reduce the number and severity of traffic collisions (specifically fatal collisions). This objective is accomplished through strategic planning, promotion of traffic safety and the diligent enforcement of traffic laws.

A review of the South Carolina Department of Public Safety, Office of Highway Safety (SCDPS-OHS) Fact Book for the years 2003, 2004 and data from 2005 indicates, over the past three years, South Carolina has experienced a significant increase in fatalities resulting from motor vehicle collisions. In 2003 there were 969 fatalities and in 2004 there were 1046 fatalities on highways throughout South Carolina. The data for 2005 has not been finalized, however, preliminary calculations indicate that during the year of 2005 there were 1089 fatalities on highways throughout South Carolina. The current data from the year 2005 indicates that this was one of the deadliest years for motor vehicle related fatalities since the state began recording data from motor vehicle collisions resulting in fatalities. SCDPS-OHS records indicate that during the year 1972 (deadliest year on record) there were 1099 fatalities resulting from motor vehicle collisions in South Carolina.
This project is in support of the Commander of the South Carolina Highway Patrol tasking each South Carolina Highway Patrol Troop Commander to develop a comprehensive plan for their perspective Troop that maximizes all available resources in support of statewide efforts to reduce traffic crashes, injuries, fatalities and to enhance vehicle and pedestrian safety on South Carolina highways.

DATA COLLECTION:

The leadership of SCHP Troop Five conducted a comprehensive review of fatal collision reports and fatal collision data for every fatal collision occurring in Troop Five (Darlington, Marlboro, Florence, Dillon, Marion, Williamsburg, Georgetown and Horry counties) for the years 2003, 2004 and through December 1st 2005. The goal of reviewing this data was to identify contributing factors of fatal collisions and to utilize this information as the foundation for developing a Troop plan to reduce fatal collisions.

The following information was reviewed and/or summarized during the review:

- Violations causing collisions
- Time, day and month collisions occurred
- Locations of collisions
- Contributing factors to collisions
- Trends related to collisions
DATA ANALYSIS:

The comprehensive review of fatal collision data occurring in Troop Five during the years of 2003, 2004 and 2005 identified six violations as the contributing cause of the collisions that resulted in fatal injuries to the driver and/or passengers in each of the eight counties of Troop Five. These violations were as follows (SCHP Troop Five Collision Data Records):

A. Speeding/Driving Too Fast for Conditions
B. Driving Under the Influence
C. Failure to Yield the Right of Way
D. Disregarding Sign/Signals
E. Changing Lanes Unlawfully
F. Following too Closely

Three of the six violations were consistently identified as the number one, number two or number three cause of collisions resulting in fatalities in each of the three years reviewed in Troop Five (appendix A). Therefore, safety education and enforcement programs will focus on (but are not limited to) the following violations (SCHP Troop Five Collision Data Records):

A. Speeding/Driving Too Fast for Conditions
B. Driving Under the Influence
C. Failure to Yield the Right of Way

FATAL COLLISION SUMMARY:

The summary of data involving fatal collisions (Appendix B) also indicated that an overwhelming majority of collisions involving fatalities were single vehicle collisions, occurring on secondary roads, on Friday nights, Saturday nights and Sunday mornings between the hours of 1800 –2400 and 0001- 0300 (Appendix B). In addition, 67% of the
fatal victims were not utilizing seat belts or safety restraint systems (SCHP Troop Five Collision Data Records). As stated in the Data Analysis, this information will provide focus (but are not limited to) and areas of emphasis for safety education and enforcement programs.

PRIORITY OF EFFORTS:
Implement public/safety awareness and selective enforcement programs focusing on (but not limited to) the violations, times, days and roads that the data analysis and fatal collision summary indicated fatal collisions are occurring.

A. Public/Safety Awareness:
Utilize SCHP Community Relation Officers (CRO) to conduct safety presentations communicating statewide fatality reduction goals and objectives. These presentations will be presented throughout Troop Five utilizing fatal collision data specific to the area where the safety presentation is conducted to include but not limited to:

- High Schools
- Driver Education Classes
- Colleges/Universities
- Civic Organizations
- Churches
- Businesses
B. ENFORCEMENT TECHNIQUES:

Troop Five leadership will schedule, assign and deploy troopers in support of fatality reduction plans utilizing the following techniques:

- Saturation
- Line Patrol
- Driver/Vehicle Inspection Check Points
- Sobriety Check Points
- Multi-Agency Cooperation

C. ENFORCEMENT EQUIPMENT:

- Marked/Semi-Marked/Unmarked Patrol Vehicles
- Dual Antenna Radar
- In-Car Camera Systems
- Multi-Agency Cooperation

EXECUTION:

A. Intent:

The primary intent will be to utilize available fatal collision data and multi-agency cooperation to maximize the number of personnel assigned to areas of high fatal collisions and violations contributing to fatal collisions during peak periods and direct specific enforcement against violations those violations shown to be leading cause(s) of fatal collisions.

B. Concept of Operations:

- Coordinate times and locations of sobriety checkpoints with local law enforcement agencies.
- Conduct briefing with Troop personnel to emphasize
county and Troop enforcement goals and reporting procedures.

• Brief personnel on times, locations and violations that has been the leading cause of fatal collisions.

• Employ late evening shifts Friday, Saturday and Sunday as indicated by fatal collision data.

• To monitor and make adjustments as needed.

**EVALUATION METHOD:**

This plan will be monitored and assessed on a daily basis by Troop leadership. Troop leadership will utilize the SCHP enforcement and reference data console, SCHP Troop Five fatal collision date records, crash reduction enforcement program (CREP) and before, during and after post shift briefings to evaluate the effectiveness of the fatality reduction efforts. As a benchmark to measure the effectiveness, troop leadership will compare fatality data from the previous year and previous quarter. In addition, the Troop Commander will conduct monthly leader meetings with Troop supervisors to discuss effective strategies, trends and refocus Troop efforts as necessary.
REFERENCES:

South Carolina Department of Public Safety, South Carolina Highway Patrol Web Site


South Carolina Highway Patrol Enforcement and Reference Data Console

South Carolina Highway Patrol, Troop Five Fatal Collision Data Records
Appendix A

Fatal Crash Summary
Fatal Victim's Seat Belt Usage
(2003-2005)

<table>
<thead>
<tr>
<th>ID</th>
<th>Wearing</th>
<th>Not Wearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>318</td>
<td></td>
<td>154</td>
</tr>
</tbody>
</table>

(Table A1)

Fatal Crash Summary
Violations Contributing to Collisions
(2003-2005)

<table>
<thead>
<tr>
<th>•</th>
<th>•</th>
<th>•</th>
<th>•</th>
<th>•</th>
</tr>
</thead>
<tbody>
<tr>
<td>194</td>
<td>112</td>
<td>74</td>
<td>59</td>
<td>194</td>
</tr>
</tbody>
</table>

DUI Speeding Failure to Yield Other Violations

(Table A2)

*Data reflects collisions investigated by the South Carolina Highway Patrol in Troop Five.

Fatality Reduction Plan
Darryl A. Kelly
### Appendix B

#### Troop Fatal Crash Summary (Roadways)

<table>
<thead>
<tr>
<th>Route Type</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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</thead>
<tbody>
<tr>
<td>Interstates</td>
<td>5</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>US Highways</td>
<td>38</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>SC Primary Highways</td>
<td>51</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>Secondary Roads</td>
<td>71</td>
<td>68</td>
<td>51</td>
</tr>
<tr>
<td>County Roads</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Total Fatal Crashes</td>
<td>170</td>
<td>144</td>
<td>125</td>
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<tr>
<td>Total Fatalities</td>
<td>175</td>
<td>153</td>
<td>144</td>
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</tbody>
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(Table B1)

#### Troop Quarterly Fatal Crash Summary (Fatalities)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan – Mar</th>
<th>Apr – Jun</th>
<th>Jul – Sep</th>
<th>Oct – Dec</th>
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<tbody>
<tr>
<td>2003</td>
<td>35</td>
<td>42</td>
<td>44</td>
<td>54</td>
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<tr>
<td>2004</td>
<td>29</td>
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<tr>
<td>2005</td>
<td>31</td>
<td>46</td>
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<td>28</td>
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(Table B2)

#### Troop Fatal Crash Summary (Times)

<table>
<thead>
<tr>
<th>Time Period</th>
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<th>2004</th>
<th>2005</th>
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<tbody>
<tr>
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<td>29</td>
<td>11</td>
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<tr>
<td>0301-0600</td>
<td>15</td>
<td>23</td>
<td>15</td>
<td>18</td>
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<tr>
<td>0601-0900</td>
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<td>11</td>
<td>15</td>
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<td>0901-1200</td>
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<td>13</td>
<td>9</td>
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<td>1201-1500</td>
<td>15</td>
<td>18</td>
<td>14</td>
<td>12</td>
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<tr>
<td>1501-1800</td>
<td>33</td>
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<td>18</td>
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<td>1801-2100</td>
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<td>30</td>
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<td>19</td>
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<tr>
<td>2101-2400</td>
<td>36</td>
<td>32</td>
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<td>21</td>
</tr>
<tr>
<td>Total Fatal Crashes</td>
<td>183</td>
<td>170</td>
<td>144</td>
<td>125</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>199</td>
<td>175</td>
<td>153</td>
<td>144</td>
</tr>
</tbody>
</table>

(Table B3)

*Data reflects collisions investigated by the South Carolina Highway Patrol in Troop Five.*