Toward ZERO Deaths

Kentucky Strategic Highway Safety Plan 2011—2014
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## Kentucky Emphasis Area Statistics 2005-2011

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</table>
Executive Summary

Kentucky has lost 3,962 people in motor vehicle crashes in the five-year period 2007-2011. The deaths and injuries from these crashes are serious public health and safety concerns that require continuous and aggressive actions.

The Governor’s Executive Committee on Highway Safety was established to address these serious public health and safety concerns. This Committee is an executive-level, multi-agency group of highway safety advocates from varying backgrounds who serve with “one voice” on Kentucky highway safety issues.

Kentucky is participating in a national effort to reduce preventable tragedies. The Kentucky Strategic Highway Safety Plan is a focused plan which outlines measurable strategic opportunities to reduce fatalities and serious injuries on our roadways. The first Strategic Highway Safety Plan in the state, published in 2006, described methods in which highway safety goals could be accomplished in 10 emphasis areas: Aggressive Driving, Commercial Vehicle Safety, Drive Smart Safety Corridors, Impaired Driving, Incident Management, Roadway Departure, Occupant Protection, Young Drivers, Traffic Records, and Legislative Issues. Two new emphasis areas were added in 2010 (Distracted Driving and Motorcycles), and an Intersection emphasis area is being included as part of this update. Responsibility for highway safety in Kentucky resides in the Office of Highway Safety in the Kentucky Transportation Cabinet. This Office, in cooperation with many agencies across the state, has spearheaded several projects in engineering, education, enforcement, and emergency services in order to reduce the state’s collisions, serious injuries, and fatalities.

From 2008 to 2011, progress was made in reducing fatalities and injuries on our roadways. Nationally, 33,808 people lost their lives in motor vehicle crashes in 2009 and an estimated 32,885 lost their lives in 2010, a decrease of 2.7 percent. In comparison, statewide, 826 were killed in 2008 and 721 were killed in 2011, an overall decrease of 12.7 percent, or 3.2 percent annually. Similarly, injuries on public roads in Kentucky decreased from 37,491 in 2008 to 36,345 in 2011, a decrease of 3.1 percent. In the U.S., the fatality rate per 100M VMT decreased 5.6 percent from 1.25 in 2008 to 1.18 in 2011. Statewide, the fatality rate per 100M VMT decreased 14.3 percent from 1.75 in 2008 to 1.50 in 2011. Significant factors in the reduction in Kentucky’s fatalities and injuries were the passage of the primary enforcement seat belt law in 2006, implementation of safety countermeasures, and targeted enforcement activities. However, year-to-year statistics involving crashes and injuries or both can be misleading due to the sporadic nature of crashes.

The primary goal of this new edition of the Kentucky Strategic Highway Safety Plan is to build on the success by establishing measurable goals and evaluating them consistently and comprehensively. This strategic plan will serve as an umbrella guide to increase coordination, communication, and cooperation among federal, state, and local agencies, non-profit organizations, and other highway safety advocates. The Governor’s Executive Committee on Highway Safety is charged with leading the statewide implementation effort and effectively deploying strategies outlined in this 2011—2014 Plan.
Governor’s Executive Committee

Governor’s Executive Committee on Highway Safety

Michael Hancock, Chair, Secretary, Kentucky Transportation Cabinet
Nancy Albright, Director, Division of Maintenance, Kentucky Transportation Cabinet
Elizabeth Baker, PhD, Regional Administrator, National Highway Traffic Safety Administration
Bill Bell, Director, Office of Highway Safety, Kentucky Transportation Cabinet
Jeff Bibb, Director, Division of Incident Management, Kentucky Transportation Cabinet
Vickie Bourne, Executive Director, Office of Transportation Delivery, Kentucky Transportation Cabinet
Rodney Brewer, Commissioner, Kentucky State Police
Terry Bunn, Director, Kentucky Injury Prevention and Research Center, University of Kentucky
Steve Davis, M.D., Commissioner, Cabinet for Health and Family Services
Tony Dehner, Commissioner, Alcoholic Beverage Control
Wayne Gentry, State Coordinator, Kentucky Operation Lifesaver
Lelia Haddle, Kentucky MADD (Mothers Against Drunk Driving)
Jamie Fiepke, Executive Director, Kentucky Motor Transport Association
Kimberly Jenkins, Legislative Liaison, Kentucky Transportation Cabinet
Stan Lampe, President, Kentuckians for Better Transportation
Michael Poynter, Executive Director, Kentucky Board of Emergency Medical Services
Jerry Pigman, Manager, Traffic & Safety Program, Kentucky Transportation Center, University of Kentucky
Robert Ratliff, Chief, Ashland Police Department
Pamela Rice, Division Administrator, Federal Motor Carrier Safety Administration
Therese Richerson, Branch Manager, Kentucky Transportation Cabinet
Rick Schad, Branch Manager, Kentucky Office of Highway Safety, Kentucky Transportation Cabinet
Jose Sepulveda, Division Administrator, Federal Highway Administration
Bryant Stiles, Kentucky Community College and Technical System
Bob Stokes, Traffic Safety Resource Prosecutor, Office of Attorney General
William Swope, State Fire Marshall, Kentucky State Fire Marshall’s Office
Mark Treesh, Executive Director, Insurance Institute of Kentucky
Steve Waddle, State Highway Engineer, Kentucky Transportation Cabinet
Chuck Wolfe, Executive Director, Office of Public Affairs, Kentucky Transportation Cabinet
Jeff Wolfe, Director, Division of Traffic Operations, Kentucky Transportation Cabinet
Troy Young, Sheriff, Kentucky Sheriff’s Association
Thomas Zawacki, Commissioner, Department of Vehicle Regulation, Kentucky Transportation Cabinet
Strategic Highway Safety Plan

PREFACE
This document, submitted on behalf of the Governor’s Executive Committee on Highway Safety, serves as a plan to increase coordination, communication, and cooperation among state, federal, and local agencies, and other highway safety advocates.

MISSION
To reduce Kentucky’s highway fatalities and injuries.

VISION
Through public and private partnerships, achieve the most improved and sustainable downward trend in highway fatalities and injuries in the nation.

GOAL
To reduce the number of highway fatalities toward Zero by December 31, 2014.
Relationship Structure

Kentucky follows the Integrated Safety Management Process, and has the following relationship structure.

**Governor’s Executive Committee on Highway Safety**

To combat the epidemic of highway fatalities and injuries occurring on Kentucky’s highways, the Governor’s Executive Committee on Highway Safety was established. The Executive Committee has the responsibility to create an integrated and strategic highway safety management program that is data-driven and performance-based. The Executive Committee also coordinates the development and implementation of goals and supporting actions, facilitates the acquisition of needed resources and provides whatever additional support is needed.
Kentucky Office of Highway Safety

The Kentucky Office of Highway Safety is responsible for the day-to-day operations of Kentucky’s Highway Safety Management Program. The Office serves as the focal point and staff to the Executive Committee. Within the Office of Highway Safety are two divisions: Highway Safety Programs and Incident Management. The Division of Highway Safety Programs is responsible for the development, implementation, and evaluation of the Strategic Highway Safety Plan. This Division also manages the Safety Education Branch and the Grants Management Branch. The Office provides requested information to the Executive Committee and the Emphasis Area Task Teams and manages and coordinates the Task Teams in the development of various strategies. The Division of Highway Safety Programs focuses on education, outreach, and marketing activities as well as coordinating the Drive Smart Safety Corridors (to be replaced with a Crash Corridors approach for applicable emphasis areas). The Division of Incident Management includes the Transportation Operations Center Branch and the Roadway Assistance Branch.

Emphasis Area Task Teams

Emphasis Area Teams are formed by the Executive Committee to address specific concerns for reducing fatalities and injuries on Kentucky’s highways. These teams identify or develop innovative strategies through the data-driven process and recommend performance-based action plans to address the particular emphasis area. They work in concert with the Office of Highway Safety. Each Emphasis Area Team submits strategies and implementation plans to the Executive Committee for approval. The Office of Highway Safety provides support and data analysis expertise to the Executive Committee for identification and prioritization of emphasis areas.

Existing State Plans, Programs and Funding

Guidance to supplement SAFETEA-LU requirements was prepared by the Federal Highway Administration in cooperation with NHTSA, FMCSA, FTA and FRA. The guidance provides that the Strategic Highway Safety Plan will be developed by the state Department of Transportation and should be based on components of existing state plans:

- Highway Safety Improvement Program (HSIP)(FHWA)
- Highway Safety Plan (HSP)(NHTSA)
- Motor Carrier Safety Assistance Program (MCSAP)(FMCSA)
- Commercial Vehicle Safety Plan (CVSP)(FMCSA)
- Traffic Records Coordinating Committee Strategic Plan for Data Improvement (KTRAC)
- Statewide and metropolitan long range transportation Plans

Funding from the above sources should be used to implement both the infrastructure and behavioral strategies and programs agreed upon in this plan. The recommendations from the Kentucky Strategic Highway Safety Plan should influence the priorities in the above mentioned plans.
Traffic Records

Traffic records are data in various forms and formats that are used in safety programs to identify problem areas, support initiation of countermeasures, and serve to verify the effectiveness of programs or specific countermeasures. The Kentucky Traffic Records Advisory Committee (KTRAC) was a group formed to advance the application and effectiveness of traffic records by improving access, and accuracy of this information to improve safety. As part of the strategic planning approach, traffic records is critical to development and advancement of emphasis areas to address and improve highway safety in Kentucky. KTRAC provides support to the emphasis area teams in the form of traffic data interpretation or application. To continue and expand the role of KTRAC, the following goals, objectives, and strategies have been developed.

Goals, Objectives, and Strategies:

Goal 1. Continually improve CRASH data quality (timeliness, accuracy, completeness, uniformity and accessibility)

Objective 1. Improve CRASH data accuracy beyond what is provided by automated edits

- Strategy 1. Increase electronic reporting in local law enforcement agencies
- Strategy 2. Update the Police Officer Professional Standards (POPS) to include mandatory training for leadership on the importance of CRASH data for highway safety.
- Strategy 3. Update Police Officer Professional Standards (POPS) to include mandatory training for leadership on the importance of crash data for highway safety.
- Strategy 4. Implement time saving and error checking capabilities in electronic reporting
- Strategy 5. Improve location capabilities in electronic reporting
- Strategy 6. Implement electronic training
- Strategy 7. Continue to improve electronic reporting

Goal 2. Continually improve Driver License data quality

Goal 3. Continually improve Vehicle Registration data quality
Goal 4. Continually improve Roadway data quality

Goal 5. Continually improve Enforcement/Adjudication data quality

Goal 6. Continually improve EMS and injury data quality

Objective 1. Improve accessibility of EMS data for traffic safety applications

- Strategy 1. Establish a statewide computerized reporting system for EMS ambulance runs
- Strategy 2. Implement Information Systems for Emergency Medical Services

Objective 2. Improve completeness and accuracy of injury data

- Strategy 1. Implement external-cause-of injury codes (E-codes) on hospital inpatient and outpatient databases, for patients involved in motor vehicle crashes

Goal 7. Continually improve integration of traffic records data systems

Objective 1. Link CRASH and vehicle registration databases

- Strategy 1. Conduct a pilot project to link the CRASH and driver license databases for the most recent three available years.

Objective 2. Establish the ability to link the CRASH and driver license databases

- Strategy 1. Conduct a pilot project to link the CRASH and vehicle registration databases for the most recent three available years.
Traffic Records

Performance Measures:

- **Timeliness:** average time from crash to inclusion of crash, citation and injury data in an analysis database
- **Accuracy:** percent of crashes and citations located properly, spatial accuracy of road geometry, percent of errors in database records and items (crash, vehicle, injury, citations, driver, roadway)
- **Completeness:** percent of complete records (crash, vehicle, injury, citations, driver, roadway)
- **Uniformity:** MMUCC, MIRE and NEMSIS compliance
- **Integration:** number of database linkages between crash and other 5 key databases; statistical reliability of probabilistically related databases
- **Accessibility:** number of unique users and hits accessing the state crash database; number of requests served by KTSDS;
Background & Collision Data Overview

All partners agree that clearly defined emphasis areas, adoption of target values in actions and activities and in specific crash type reductions, identification and implementation of selected strategies, and evaluation plans are now needed to achieve significant reductions in deaths and injuries for the benefit of the general public. The safety partners must embrace the guidance provided by the Kentucky Strategic Highway Safety Plan and commit to coordinate and integrate their planning, programs and, when appropriate, resources to achieve notable safety advances.

Collision Data Trends

In 2011, Kentucky reported a total of 127,524 collisions, 670 fatal collisions and 24,196 injury collisions. There was an increase of 72 collisions year to year (127,452 total in 2010), a decrease of 20 fatal collisions (670 total), and a decrease of 824 injuries (35,780 total). There were also declines in fatalities and injuries in collisions from 2010 to 2011. In 2010, 756 people were killed and 36,604 people were injured, in 2011, 721 people were killed (35) and 35,780 people were injured (824). Based on National Safety Council estimates, the annual economic loss due to 2011 traffic crashes in Kentucky was $2.1 billion with a total comprehensive cost of $5.5 billion. Deaths and injuries from these traffic crashes are a serious public health concern.

![Kentucky Fatality Numbers 2002-2011](image-url)
Fatality Rates
The first half of the last ten years shows an increase in Kentucky’s fatality rate, rising to 2.08 fatalities per 100 million vehicle miles in 2005. However, the period from 2007-2011 showed a steady downward turn to 2011 with a 9.6 percent decrease in Kentucky’s fatality rate to 1.50 fatalities per 100 million vehicle miles in comparison to the 2007-2010 average of 1.66.

Demographics
In 2011 male drivers were involved in 55.1 percent of all collisions and 71.6 percent of all fatal collisions. Females were the drivers in 44.9 percent of all collisions and 28.4 percent of fatal collisions. By age, 25-34 year-old drivers were involved in the highest percentage of collisions: 21 percent of all collisions and 21 percent of all fatal collisions. Next, drivers 35-44 were involved in 18 percent of all collisions and 17 percent of all fatal collisions. In terms of teenage drivers (age 16-19), 10 percent of this age group were involved in all collisions and 6 percent in fatal collisions. It is important to note that teenage drivers are only 6.6 percent of the total population of licensed drivers in Kentucky, including those with a learner permit. There were 71 fatalities in collisions involving a teenage driver; 25 of these fatalities were the teen drivers themselves.
Trends in Crash Statistics
A comparison of crash numbers indicate that the total crashes in 2011 increased by 1.7 percent as compared to the average crashes during the period 2007 to 2010. The number of fatal crashes in 2011 decreased by 9.9 percent as compared to the average fatal crashes during the period 2007 to 2010. Injury crashes decreased over 4 percent in 2011 from the average crashes during 2007 to 2010.

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2007-2010</th>
<th>2011</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Crashes</td>
<td>124,553</td>
<td>123,530</td>
<td>126,237</td>
<td>127,452</td>
<td>125,443</td>
<td>127,524</td>
<td>1.66%</td>
</tr>
<tr>
<td>Fatal Crashes</td>
<td>803</td>
<td>752</td>
<td>730</td>
<td>690</td>
<td>744</td>
<td>670</td>
<td>-9.9%</td>
</tr>
<tr>
<td>Fatalities</td>
<td>864</td>
<td>826</td>
<td>791</td>
<td>756</td>
<td>809</td>
<td>721</td>
<td>-10.9%</td>
</tr>
<tr>
<td>Injury Crashes</td>
<td>26,086</td>
<td>25,322</td>
<td>25,036</td>
<td>24,749</td>
<td>25,298</td>
<td>24,196</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Injuries</td>
<td>37,975</td>
<td>36,876</td>
<td>36,762</td>
<td>36,604</td>
<td>37,054</td>
<td>35,780</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Fatal &amp; Injury Crashes</td>
<td>26,889</td>
<td>26,074</td>
<td>25,766</td>
<td>25,439</td>
<td>26,042</td>
<td>24,866</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Licensed Drivers (Millions)</td>
<td>3.00</td>
<td>3.03</td>
<td>3.09</td>
<td>3.10</td>
<td>3.06</td>
<td>3.11</td>
<td>1.8%</td>
</tr>
<tr>
<td>Registered Vehicles (Millions)</td>
<td>3.76</td>
<td>3.78</td>
<td>3.74</td>
<td>3.78</td>
<td>3.77</td>
<td>3.76</td>
<td>-0.1%</td>
</tr>
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<td>Total Vehicle Miles (Billions)</td>
<td>47.9</td>
<td>47.2</td>
<td>47.2</td>
<td>48.1</td>
<td>47.6</td>
<td>48.2</td>
<td>1.3%</td>
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<td>Total Crashes/100 MVM</td>
<td>260</td>
<td>262</td>
<td>267</td>
<td>262</td>
<td>264</td>
<td>265</td>
<td>0.2%</td>
</tr>
<tr>
<td>Fatal Crashes/100 MVM</td>
<td>1.68</td>
<td>1.59</td>
<td>1.55</td>
<td>1.59</td>
<td>1.57</td>
<td>1.39</td>
<td>-11.4%</td>
</tr>
<tr>
<td>Fatalities/100 MVM</td>
<td>1.80</td>
<td>1.75</td>
<td>1.68</td>
<td>1.58</td>
<td>1.70</td>
<td>1.50</td>
<td>-11.9%</td>
</tr>
<tr>
<td>Injuries/100 MVM</td>
<td>81</td>
<td>79</td>
<td>79</td>
<td>79</td>
<td>79</td>
<td>75</td>
<td>-4.5%</td>
</tr>
</tbody>
</table>
**Fatal Crashes by Type and Area of Roadway**

In Kentucky, 49 percent of fatal crashes during the period 2007 to 2011 occurred on state routes, 24 percent occurred on U. S. routes and 10 percent occurred on interstate highways. In addition, the number of fatalities in the rural areas was consistently higher than those in the urban areas over the years. During the period 2007 to 2011, 58 percent of total fatalities occurred on rural roads and 42 percent occurred on urban roads.

### Kentucky Fatal Crashes by Type of Roadway 2007-2011

<table>
<thead>
<tr>
<th>Type of Roadway</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>% of Total Crashes 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>85</td>
<td>75</td>
<td>75</td>
<td>70</td>
<td>57</td>
<td>10%</td>
</tr>
<tr>
<td>U.S. Route</td>
<td>202</td>
<td>167</td>
<td>173</td>
<td>168</td>
<td>178</td>
<td>24%</td>
</tr>
<tr>
<td>State Route</td>
<td>387</td>
<td>385</td>
<td>347</td>
<td>344</td>
<td>332</td>
<td>49%</td>
</tr>
<tr>
<td>Parkway</td>
<td>12</td>
<td>16</td>
<td>26</td>
<td>17</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td>County Road</td>
<td>76</td>
<td>71</td>
<td>67</td>
<td>60</td>
<td>59</td>
<td>9%</td>
</tr>
<tr>
<td>City Street</td>
<td>38</td>
<td>32</td>
<td>36</td>
<td>29</td>
<td>36</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>803</td>
<td>752</td>
<td>730</td>
<td>694</td>
<td>670</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Does not include crashes occurring on parking lots/private properties.

### Fatalities by Rural/Urban Environment 2007-2011

<table>
<thead>
<tr>
<th>Environment</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>% of Total Crashes 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>525</td>
<td>483</td>
<td>473</td>
<td>429</td>
<td>403</td>
<td>58%</td>
</tr>
<tr>
<td>Urban</td>
<td>339</td>
<td>343</td>
<td>318</td>
<td>331</td>
<td>318</td>
<td>42%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>864</td>
<td>826</td>
<td>791</td>
<td>760</td>
<td>721</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Does not include crashes occurring in parking lots/or private properties.
**Occupant Protection**

There has been a gradual increase in seat belt use in the last ten years. However, with the passage of the primary seat belt law in 2006 and the beginning of ticketed enforcement in 2007, the seat belt usage rate increased from 82 percent in 2011 to 84 percent in 2012. The 2012 data also suggests that occupants wearing a seat belt are increasingly unlikely to be injured or killed in a collision. Of those people killed in collisions in 2011, 34 percent were wearing a restraint while 43 percent were not wearing a restraint (23 percent were fatalities where a safety restraint was not available such as pedestrians, motorcyclists, and bicyclists). The table below demonstrates that restraint users are less likely to have injuries than non-restraint users.

<table>
<thead>
<tr>
<th>Injury Status</th>
<th>All Occupants (Applicable)</th>
<th>Restraint Used</th>
<th>Percentage</th>
<th>Restraint Not Used</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killed</td>
<td>721</td>
<td>243</td>
<td>34%</td>
<td>310</td>
<td>43%</td>
</tr>
<tr>
<td>Incapacitating Injury</td>
<td>3,873</td>
<td>2,492</td>
<td>64%</td>
<td>721</td>
<td>19%</td>
</tr>
<tr>
<td>Non-Incapacitating Injury</td>
<td>12,271</td>
<td>9,641</td>
<td>79%</td>
<td>1,282</td>
<td>10%</td>
</tr>
<tr>
<td>Possible Injury</td>
<td>20,201</td>
<td>17,465</td>
<td>86%</td>
<td>1,330</td>
<td>7%</td>
</tr>
<tr>
<td>Not Injured</td>
<td>349,162</td>
<td>259,722</td>
<td>74%</td>
<td>3,655</td>
<td>1%</td>
</tr>
</tbody>
</table>
Although the annual number of traffic collision deaths has declined by 23% from 2006 to 2010, pedestrians fatalities have decreased by 11% during the same period, and account for about 13 percent of traffic fatalities nationwide in 2010 compared to 11% in 2006 (Fatality Analysis Reporting System; www.fars.nhtsa.dot.gov/). Pedestrian fatalities are most likely to occur in urban areas with about 74 percent of pedestrian fatalities occurring in urban areas per the Geospatial Analysis of Rural Motor Vehicle Traffic Fatalities; National Highway Traffic Safety Administration; November 2009. Pedestrian fatalities as a portion of total fatalities in Kentucky, being relatively rural compared to other states, ranks well below the national average at 7%. But in Kentucky’s more urbanized areas of Covington, Lexington and

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions All</th>
<th>Injury</th>
<th>Fatal</th>
<th>Persons Injuries</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>897</td>
<td>749</td>
<td>55</td>
<td>830</td>
<td>56</td>
</tr>
<tr>
<td>2006</td>
<td>904</td>
<td>755</td>
<td>53</td>
<td>847</td>
<td>53</td>
</tr>
<tr>
<td>2007</td>
<td>888</td>
<td>746</td>
<td>46</td>
<td>823</td>
<td>47</td>
</tr>
<tr>
<td>2008</td>
<td>989</td>
<td>785</td>
<td>64</td>
<td>870</td>
<td>66</td>
</tr>
<tr>
<td>2009</td>
<td>935</td>
<td>768</td>
<td>39</td>
<td>850</td>
<td>39</td>
</tr>
<tr>
<td>2010</td>
<td>1,049</td>
<td>846</td>
<td>56</td>
<td>937</td>
<td>60</td>
</tr>
<tr>
<td>2011</td>
<td>1,051</td>
<td>851</td>
<td>52</td>
<td>937</td>
<td>52</td>
</tr>
</tbody>
</table>
Pedestrian Safety

Louisville the rate for pedestrian fatalities is 50 percent to 100 percent higher at 18%, 16.5% and 22.5%, respectively, during the 5 years from 2006 to 2010.

**Goals, Objectives, and Strategies:**

**Goal:** Reduce the number and severity of crashes involving pedestrians

**Objective:** Reduce the pedestrian fatality in Louisville to 17% in 2015 as compared to the 2010 rate of 24.7%

**Strategies:**

- Implement a comprehensive, age-appropriate approach to school traffic safety, including school facilities planning, collaboration, and coordination among those responsible for education, transportation, and land use planning to maximize safety for children walking to and from schools.
- Develop pedestrian safety improvement programs to identify and improve safety at high-crash concentration locations involving pedestrians.
- Form a task force to assist in development of pedestrian safety action plans, to facilitate training delivery, and to establish pedestrian safety improvement programs in Louisville and other urbanized areas.
- Promote pedestrian safety audits and implementation of recommendations.
- Establish a Pedestrian Safety Focus Team to develop and implement a comprehensive Pedestrian Safety Data Plan which improves and institutionalizes pedestrian safety data collection and analysis, ensures that existing data collection efforts include information on pedestrian fatalities, injuries, and exposure, and implements a readily available format for local research and investigation.
- Improve pedestrian striping, signage, and signalization and include standard safety upgrades in routine maintenance and striping projects.
- Assess both the Kentucky Drivers Manual and standard traffic school curriculum for information on pedestrian-related laws, collision factors, and defensive walking and make additions/revisions as necessary. Develop and provide complementary ongoing pedestrian safety education materials reinforced with public information programs.
- Implement Complete Streets—providing safe access for all modes—and model pedestrian safety principles as fundamental in transportation and land use plans with incentives to cities, counties, and regions to integrate pedestrian safety in general and specific land use plans, transportation plans, and other policy documents.
Kentucky’s Emphasis Areas

Toward ZERO Deaths 2011--2014
Emphasis Areas

When first published in September 2006, *Kentucky's Roadmap to Safer Highways* focused on targeted emphasis areas and the creation of teams to address strategies and initiatives within each area. This update to the strategic plan titled *Toward ZERO Deaths* includes the following 10 emphasis areas:

- Aggressive Driving
- Commercial Motor Vehicles
- Distracted Driving
- Impaired Driving
- Incident Management
- Intersections
- Motorcycles
- Occupant Protection
- Roadway Departure
- Young Drivers

The emphasis areas of Motorcycles and Distracted Driving were identified and teams were formed in 2009. Traffic Records and Legislative Issues have been deleted and are now incorporated as subset of each emphasis area. Lane Departure was replaced with Roadway Departure to be more comprehensive and consistent with national guidelines. Roadway safety includes not only the safety of motorists, but also the safety of pedestrians and bicyclists that are part of the roadway users. These “special users” are involved in many of the current emphasis areas.

The following pages include a qualitative and/or quantitative description of the current status and the progress made in each of these emphasis areas through 2011.

### Kentucky Emphasis Area Statistics 2011

<table>
<thead>
<tr>
<th></th>
<th>Collisions</th>
<th>Injury Collisions</th>
<th>Fatal Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>% of Total</td>
<td>Number</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>127,524</td>
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<td>24,196</td>
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</tbody>
</table>

### Measurable Emphasis Areas

<table>
<thead>
<tr>
<th>Emphasis Area</th>
<th>Collisions</th>
<th>Injury Collisions</th>
<th>Fatal Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Driving</td>
<td>32,688</td>
<td>7,482</td>
<td>211</td>
</tr>
<tr>
<td>Commercial Motor Vehicles</td>
<td>5,301</td>
<td>904</td>
<td>71</td>
</tr>
<tr>
<td>Distracted Driving</td>
<td>53,725</td>
<td>9,562</td>
<td>159</td>
</tr>
<tr>
<td>Impaired Driving</td>
<td>5,607</td>
<td>2,015</td>
<td>136</td>
</tr>
<tr>
<td>Intersections</td>
<td>32,186</td>
<td>6,625</td>
<td>90</td>
</tr>
<tr>
<td>Motorcycles</td>
<td>1,839</td>
<td>1,145</td>
<td>71</td>
</tr>
<tr>
<td>Roadway Departure</td>
<td>40,313</td>
<td>10,257</td>
<td>475</td>
</tr>
<tr>
<td>Young Drivers</td>
<td>25,899</td>
<td>5,437</td>
<td>81</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67%</td>
<td>67%</td>
<td>72%</td>
<td>73%</td>
<td>80%</td>
<td>80%</td>
<td>82%</td>
<td></td>
</tr>
</tbody>
</table>
AGGRESSIVE DRIVING
**Emphasis Areas**

### Aggressive Driving

**Emphasis Area Definition:**
Aggressive driving is generally defined as actions by drivers that result in adverse safety effects on other drivers and contribute to crashes that are coded as follows: failure to yield right of way, following too close, too fast for conditions, disregarding traffic control, exceeding stated speed limit, improper passing, and weaving in traffic.

**Emphasis Area Team Leader:**
Captain David Jude, Kentucky State Police

**Emphasis Area Goal:**
The goal is to determine the level of aggressive driving within Kentucky and implement strategies to address and reduce aggressive driving.

### Kentucky Aggressive Driving Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td>2005</td>
<td>33,728</td>
<td>9,062</td>
</tr>
<tr>
<td>2006</td>
<td>32,588</td>
<td>8,424</td>
</tr>
<tr>
<td>2007</td>
<td>31,499</td>
<td>7,903</td>
</tr>
<tr>
<td>2008</td>
<td>31,395</td>
<td>7,829</td>
</tr>
<tr>
<td>2009</td>
<td>31,649</td>
<td>7,576</td>
</tr>
<tr>
<td>2010</td>
<td>32,029</td>
<td>7,605</td>
</tr>
<tr>
<td>2011</td>
<td>32,688</td>
<td>7,482</td>
</tr>
</tbody>
</table>

---

**Kentucky Aggressive Driving Percentages of Total 2005-2011**

---

16 Toward ZERO Deaths 2011--2014
**Aggressive Driving**

**Emphasis Area Objective:**
Reduce the types of traffic collisions associated with aggressive driving by 5 percent per year by 2014.

**Emphasis Area Strategies:**
*(Check marks illustrate implemented strategies)*

- **Strategy 4.2d:** To continue to enhance and promote highly publicized and high-visibility enforcement programs

- **Strategy 4.2e:** To conduct directed patrols in areas based on citizen complaints of aggressive driving

- **Strategy 4.2f:** To conduct directed patrols in areas based on law enforcement knowledge of aggressive driving behaviors

- **Strategy 4.2g:** To conduct directed patrols in areas based on collision data related to aggressive driving

- **Strategy 4.2h:** Provide information sharing between state and local law enforcement agencies to address aggressive driving

**Emphasis Area Performance Measures:**
- Number of citizen complaints recorded
- Number of traffic tickets issued
- Total, fatal, and injury crashes

**Legislative Issues:**
COMMERICAL VEHICLE SAFETY
Commercial Vehicle Safety

Emphasis Area Definition:
A commercial vehicle is a vehicle with a registered weight of 10,000 pounds or more.

Emphasis Area Team Leaders:
Greg Jenkins & Brian Howard, Kentucky State Police

Emphasis Area Goal:
Reduce the number and severity of crashes involving commercial motor vehicles and hazardous materials incidents

Emphasis Area Objective:
Reduce the fatality rate involving commercial motor vehicles in 2014 by 12% as compared to the 2008 rate of 1.59 fatalities per million truck vehicle-miles traveled

Kentucky Commercial Motor Vehicle Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td>2005</td>
<td>6,936</td>
<td>1,404</td>
</tr>
<tr>
<td>2006</td>
<td>6,931</td>
<td>1,320</td>
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<tr>
<td>2007</td>
<td>6,643</td>
<td>1,253</td>
</tr>
<tr>
<td>2008</td>
<td>6,168</td>
<td>1,088</td>
</tr>
<tr>
<td>2009</td>
<td>4,915</td>
<td>908</td>
</tr>
<tr>
<td>2010</td>
<td>5,069</td>
<td>896</td>
</tr>
<tr>
<td>2011</td>
<td>5,301</td>
<td>904</td>
</tr>
</tbody>
</table>
Emphasis Areas

Commercial Vehicle Safety

Emphasis Area Strategies:
(Check marks illustrate implemented strategies)

- Identify high crash corridors involving commercial vehicles and initiate appropriate engineering and enforcement interventions, where appropriate
- Coordinating with the appropriate state entities regarding feasibility of using information boards and rest areas to post information on these high crash corridors
  √ Promote the increase of space/parking capacity for commercial vehicles in interstate rest areas and rest havens
  √ Educate roadway users, motor carriers, and the agriculture community on commercial vehicle performance, visibility, and regulations including the No-Zone Program, hazardous materials, etc.
- Implement national and state specific program elements:
  1. Driver/Vehicle Inspections
  2. Compliance Reviews
  3. Traffic Enforcement
  4. Public Education and Awareness
  5. Data Collection and Reporting
- Implement other strategies identified in Kentucky’s annual Commercial Vehicle Safety Plan, which is part of the Motor Carrier Safety Assistance Program (MCSAP).

Emphasis Area Performance Measures:

- Number of events organized for public education
- Number of weigh facilities opened for truck parking
- Number of total/fatal/injury crashes

Legislative Issues:
Distracted Driving
**Emphasis Areas**

## Distracted Driving

**Emphasis Area Definition:**
Distracted driving is any activity by the operator of a motor vehicle that has the potential to distract the operator from the primary task of driving, increasing the risk of crashing.

**Emphasis Area Team Leader:**
Rick Schad, Branch Manager, Kentucky Office of Highway Safety, KYTC

**Overview of Legislation:**
House Bill 415, signed into law on April 15, 2010, bans texting for drivers of all ages while the vehicle is in motion. **For drivers 18 and over,** it allows the use of global positioning devices and reading, selecting or entering a

### Kentucky Distracted Driving Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td>2005</td>
<td>55,842</td>
<td>11,132</td>
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<tr>
<td>2006</td>
<td>55,293</td>
<td>10,775</td>
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<td>2007</td>
<td>53,078</td>
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<tr>
<td>2008</td>
<td>50,749</td>
<td>9,436</td>
</tr>
<tr>
<td>2009</td>
<td>54,435</td>
<td>9,846</td>
</tr>
<tr>
<td>2010</td>
<td>54,450</td>
<td>9,834</td>
</tr>
<tr>
<td>2011</td>
<td>53,725</td>
<td>9,562</td>
</tr>
</tbody>
</table>

---

**Kentucky Distracted Driving Percentages 2005-2011**

![Kentucky Distracted Driving Percentages 2005-2011](chart.png)
Distracted Driving

telephone number or name for the purpose of making a call. For drivers under 18, KRS 189.294 goes a step further by prohibiting both texting and cell phone use for this age group. The use of a global positioning system is allowed, but manually entering information must be completed while the vehicle is stopped.

Emphasis Area Goal:
Reduce the number of crashes, injuries, and fatalities related to driver distractions

Emphasis Area Objective:
Reduce the types of traffic collisions associated with distracted driving by 5 percent per year by 2014

Emphasis Area Strategies:
• Provide information to the public on the recently passed legislation to ban texting
• Use the D2 Simulator in schools and community venues to demonstrate and reinforce the dangers of distracted driving
• Produce and disseminate public service announcements on distracted driving using University of Kentucky and Western Kentucky University coaches
• Encourage and support increased law enforcement activities to reduce distracted driving

Legislative Issues:
IMPAIRED DRIVING
**Emphasis Areas**

## Impaired Driving

### Emphasis Area Definition:
Impaired driving is recognized as driving a motor vehicle under the influence of alcohol or narcotics.

### Emphasis Area Team Leader:
Bob Stokes, Traffic Safety Resource Prosecutor, Office of Attorney General

### Emphasis Area Goals:
- To reduce the number of fatalities and serious injuries involving impaired driving by 5 percent per year by 2014
- To reduce the number of impaired driving crashes through increased enforcement and legislative changes including Administrative License Revocation and lowering the High BAC to .15

### Kentucky Alcohol & Drug Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Injury</th>
<th>Fatal</th>
<th>Injuries</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>6,239</td>
<td>2,579</td>
<td>217</td>
<td>3,931</td>
<td>241</td>
</tr>
<tr>
<td>2006</td>
<td>6,203</td>
<td>2,534</td>
<td>181</td>
<td>3,829</td>
<td>193</td>
</tr>
<tr>
<td>2007</td>
<td>5,996</td>
<td>2,345</td>
<td>179</td>
<td>3,431</td>
<td>189</td>
</tr>
<tr>
<td>2008</td>
<td>5,897</td>
<td>2,247</td>
<td>160</td>
<td>3,373</td>
<td>166</td>
</tr>
<tr>
<td>2009</td>
<td>5,992</td>
<td>2,236</td>
<td>148</td>
<td>3,348</td>
<td>162</td>
</tr>
<tr>
<td>2010</td>
<td>5,858</td>
<td>2,162</td>
<td>144</td>
<td>3,284</td>
<td>154</td>
</tr>
<tr>
<td>2011</td>
<td>5,607</td>
<td>2,015</td>
<td>136</td>
<td>3,055</td>
<td>147</td>
</tr>
</tbody>
</table>

---

### Kentucky Alcohol & Drug Percentages of Total 2005-2011

![Bar chart showing percentages of total collisions and fatalities from 2005 to 2011]
Emphasis Areas

Impaired Driving

Emphasis Area Goals: (cont’d)

- To combat the increased drug-impairment problem by increasing the number of Drug Recognition Experts in areas of the state identified as having the greatest problem.
- To continue to reduce the growing underage-drinking problem in Kentucky through legislative changes that mandate social host, keg registration and server training
- To continue to improve the ability of prosecutors to effectively prosecute impaired driving offenders through increased training

Emphasis Area Objective:

- To identify safety issues related to impaired driving and implement countermeasures to reduce the frequency and severity of related crashes

Emphasis Area Strategies:

(Check marks illustrate implemented strategies)

- Expand upon the Drug Recognition Expert Program
- Continue with educational programs that bring awareness to the drunk and drugged driving problem
- Continue cross-education of prosecutors and law enforcement in impaired-driving procedures that involve standard field sobriety testing, DRE testimony and probable cause testimony.
- Continue to coordinate and expand state/local checkpoints
- Continue to implement data driven impaired driving enforcement
- Continue to coordinate with media outlets
- Educate individuals and legislators about the benefits of lowering the High BAC from .18 to .15 through workshops using data-driven impaired-driving enforcement statistics and wet labs
- Continue efforts to implement Administrative License Revocation (ALR) for operating motor vehicles while under the influence of alcohol determined by chemical testing
- Continue to impose mandatory server training to reduce underage purchases of alcohol and reduce over-service of alcohol to persons who are intoxicated
Emphasis Areas

Impaired Driving

Emphasis Area Strategies:  (cont’d)

• Continue to seek legislation that requires beer kegs to be tagged with purchaser’s name, address and location where keg is used
• Continue to seek legislation that imposes liability on social hosts who allow minors to consume alcohol
• Increase awareness and enforcement of existing social host and mandatory server training ordinances.

Emphasis Area Performance Measures:

• Number of injury/fatal/total crashes involving impaired driving
• Number of impaired driving arrests
• Number of driving licenses suspended
• Recidivism rate
• Number of prosecutors/law enforcement officers educated
• Number of times bills related to impaired driving are introduced
• Number of citations issued by law enforcement in cities that have social host ordinances

Legislative Issues:

• Seek legislation to require beer kegs to be tagged with purchaser’s name, address and location where keg is used. Seek legislation that imposes liability on social hosts who allow minors to consume alcohol.
Incident Management
Incident Management

Emphasis Area Definition:
Incident management as related to highway transportation is the process of response to highway incidents to improve safety and reduce traveler delay.

Emphasis Area Team Leader:
Jeff Bibb, Office of Highway Safety, KYTC

Emphasis Area Goals:
Four basic goals have been identified as the focus of Kentucky’s Highway Incident Management Strategic Plan. These goals reflect long-term, system-level aspirations and are based on the input of Kentucky’s stakeholders and other national, state, and regional plans.

GOALS OF KENTUCKY’S HIGHWAY INCIDENT MANAGEMENT STRATEGIC PLAN
G1. Improve Safety of Responders and Motorists
G2. Reduce Traffic Delay
G3. Improve Motorist Awareness
G4. Improve Responder Preparedness
G5. Improve understanding/implementation of Quick Clearance law

Emphasis Area Objective:
To improve safety and reduce traveler delay by implementing an effective, multi-agency incident management program.

Emphasis Area Strategies:

<table>
<thead>
<tr>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote the use of the national incident management system.</td>
</tr>
<tr>
<td>Establish or enhance local incident management teams and cultivate their development.</td>
</tr>
<tr>
<td>Incorporate interagency incident management training and emergency traffic control training into the ongoing training of all responders.</td>
</tr>
<tr>
<td>Share Kentucky’s highway incident management strategic plan with responders and update the plan regularly.</td>
</tr>
<tr>
<td>Identify and address the issues by providing timely incident information to the public.</td>
</tr>
</tbody>
</table>
## Incident Management

### Emphasis Area Strategies: (cont’d)

<table>
<thead>
<tr>
<th>Education (cont’d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate a public information campaign for motorists on the proper response to an incident</td>
</tr>
<tr>
<td>Encourage expanded use of interoperable communication capabilities</td>
</tr>
<tr>
<td>Provide training on Kentucky’s &quot;open roads&quot; policy for interstates and parkways</td>
</tr>
<tr>
<td>Provide training to responders on the quick clearance law</td>
</tr>
<tr>
<td>Encourage installation of push bumpers on responder vehicles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refine quick clearance law to include clauses to limit liability of responders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement barrier openings or emergency crossovers where needed</td>
</tr>
<tr>
<td>Identify and address the delays and safety problems associated with work zones and maintenance activities</td>
</tr>
<tr>
<td>Enhance the capability of current traffic management centers and implement other centers, as needed</td>
</tr>
<tr>
<td>Implement reference and ramp markers in high incident areas or on critical routes</td>
</tr>
<tr>
<td>Identify critical or &quot;Decision Point&quot; locations where ITS technology should be located to disseminate incident information</td>
</tr>
<tr>
<td>Identify issues with the 511 system and implement strategies for improvement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve the warning system for the end of the traffic queue at major incidents to reduce secondary crashes</td>
</tr>
<tr>
<td>Sponsor post-incident debriefings for all major incidents</td>
</tr>
</tbody>
</table>
Incident Management

Emphasis Area Strategies: (cont’d)

<table>
<thead>
<tr>
<th>Emergency Response (cont’d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand the freeway service patrols to augment ongoing incident management activities</td>
</tr>
<tr>
<td>Refine the architecture for sharing incident information among responding agencies, and with agencies along detour routes that may be impacted</td>
</tr>
<tr>
<td>Expand the number of KYTC Incident Management Coordinators, reducing the geographic area that they are responsible for.</td>
</tr>
<tr>
<td>Provide 24-hour incident response by all Kentucky Transportation Cabinet district offices.</td>
</tr>
<tr>
<td>Improve planning and preparation for response to hazardous materials incidents on the roadways</td>
</tr>
</tbody>
</table>

Emphasis Area Performance Measures:
- Number of injury/fatal/total crashes
- Average incident response time
- Average incident clearance time
- KYEM, TIM Self-Assessment score

Legislative Issues:
Intersections
**Intersections**

**Emphasis Area Definition:**
The term intersection crash is defined as a crash which occurs just before, just after or inside the limits where two or more highways join or cross.

**Emphasis Area Team Leader:**
Jarrod Stanley, Division of Traffic Operations, KYTC

**Emphasis Area Goals:**
- To reduce the number of annual roadway intersection fatalities by 10 per year by December 31, 2014
- To reduce the number of annual roadway intersection crashes involving incapacitating injuries by 100 per year by December 31, 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td></td>
<td>Injuries</td>
<td>Fatalities</td>
</tr>
<tr>
<td>2005</td>
<td>40,393</td>
<td>9,165</td>
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<tr>
<td></td>
<td>14,494</td>
<td>154</td>
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<tr>
<td>2006</td>
<td>39,236</td>
<td>8,515</td>
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<td></td>
<td>13,289</td>
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<td>2007</td>
<td>37,744</td>
<td>8,013</td>
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<td></td>
<td>12,487</td>
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<td>2008</td>
<td>32,479</td>
<td>7,088</td>
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<tr>
<td></td>
<td>10,925</td>
<td>87</td>
</tr>
<tr>
<td>2009</td>
<td>32,199</td>
<td>6,766</td>
</tr>
<tr>
<td></td>
<td>10,740</td>
<td>88</td>
</tr>
<tr>
<td>2010</td>
<td>32,546</td>
<td>6,770</td>
</tr>
<tr>
<td></td>
<td>10,742</td>
<td>99</td>
</tr>
<tr>
<td>2011</td>
<td>32,186</td>
<td>6,625</td>
</tr>
<tr>
<td></td>
<td>10,634</td>
<td>90</td>
</tr>
</tbody>
</table>

**Kentucky Intersection Statistics**
Intersections

Emphasis Area Objectives:
- To implement cost-effective countermeasures at acceptable deployment levels to achieve the planned reduction in intersection fatalities and incapacitating injury collisions
- To advance new strategies and concepts that support reductions in intersection fatalities and incapacitating injuries
- Program projects from current year Intersection Emphasis List

Emphasis Area Strategies:

Engineering
- Implement use of Flashing Yellow Arrow (FYA) where applicable
- Implement Retro reflective back plates
- Encourage Districts to perform routine inspections of signal hardware and software
- Implement High Friction Surface at intersection approaches where applicable
- Implement use of supplemental signal heads where applicable
- Ensure signal clearance intervals are appropriate
- Review signal head placement and visibility
- Develop standard signs and markings layouts to be used by field personnel
- Improve management of access near signalized/unsignalized intersections
- Improve sight distance at signalized/unsignalized intersections
- Provide additional guidance features through complex intersections
- Consider systematic implementation of low cost countermeasures for pedestrian crashes

Enforcement
- Support enhanced enforcement on roadways with high frequencies of red-light running collisions
- Encourage law enforcement participation in road safety audit activities
Intersections

Emphasis Areas

Emphasis Area Strategies: (cont’d)

**Education**

- Support Continue support for driver education programs
- Increase communication with media, citizens, partners etc. regarding red-light running, flashing yellow arrow indications and alternative intersection designs
- Have Safety Circuit Rider program include educational material about intersection safety issues for local officials

**Emphasis Area Performance Measures:**

- Reduction in annual fatalities involving intersection collisions (3-year moving average)
- Reduction in annual intersection collisions involving incapacitating injuries (3-year moving average)
- Review intersections on Intersection Emphasis List for possible implementation of countermeasures at a rate of 1 per month

**Legislative Issues:**
Toward ZERO Deaths          2011--2014

Emphasis Areas

MOTORCYCLES
**Motorcycles**

**Emphasis Area Definition:**
“Licensed motorcycle operator” refers to a licensed operator with either standard Kentucky operator’s license containing motorcycle endorsement, standard Kentucky license containing commercial and motorcycle endorsements or a motorcycle license only. Licensed operator refers to any issued Kentucky license excluding learner’s permits, intermediate or moped-only licenses.

**Emphasis Area Team Leader:**
Wayne Steele; Coordinator; Safety, Security, & Emergency Mgmt., Eastern Kentucky University

**Emphasis Area Goals:**
- To reduce by 15% (in 2014) fatality and alcohol related accidents involving motorcycles through implementation of

---

**Kentucky Motorcycle Statistics**

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td>2005</td>
<td>1,777</td>
<td>1,185</td>
</tr>
<tr>
<td>2006</td>
<td>1,765</td>
<td>1,181</td>
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<tr>
<td>2007</td>
<td>2,087</td>
<td>1,395</td>
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<td>2008</td>
<td>2,159</td>
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<td>2009</td>
<td>1,915</td>
<td>1,238</td>
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<tr>
<td>2010</td>
<td>1,961</td>
<td>1,256</td>
</tr>
<tr>
<td>2011</td>
<td>1,839</td>
<td>1,145</td>
</tr>
</tbody>
</table>
Motorcycles

Emphasis Area Goals: (cont’d)
strategies which target motorcycles and motor vehicle operators

• To increase Motorcycle operators’ awareness of need to be visible
• To increase awareness of motor vehicle operators of requirement to share the road with motorcycles
• To increase use of D.O.T. certified helmets by motorcycle operators

Emphasis Area Objective:
To identify safety issues related to motorcycles and implement programs to reduce the frequency and severity of crashes involving motorcycles

Emphasis Area Strategies:

Driver Education
• Public service announcements focusing on the safety benefits of helmets
• Billboards targeting the motoring public to promote safely sharing the road with motorcycles
• Gas topper ads promoting helmet use and safely sharing the road
• Partner with motorcycle establishments to display educational items for sober rides
• Attend rides and rallies to distribute educational tip sheets
• Contact permit motorcycle operators to encourage proper licensing
• Continue partnership with the Kentucky Motorcycle Program at Eastern Kentucky University
• Encourage the use of reflective materials and headlamp modulation systems through public service announcements and educational tip sheets

Police Officer Education
• Work with the Department of Criminal Justice Training and Kentucky State Police Academy to educate officers in detection of impaired motorcyclists

Directed Patrols
• Continue partnerships with law enforcement agencies, the Kentucky Office of Highway Safety Program, and other highway safety partners

Promotional Outreach
• Provide high visibility patches, tape, stickers and arm bands with safety messages to motorcycle riders
Emphasis Areas

Motorcycles

Emphasis Area Performance Measures

- Monitor number of fatal and injury crashes involving motorcycles
- Conduct statewide representative survey before and after implementation of strategies

Legislative Issues:

Accomplished

- House Bill 328, which was passed by the 2012 Legislature, requires motorcyclist’s driver permits to expire after one year if a full license is not obtained

Proposed

- Mandatory helmet law
Emphasis Areas

Toward ZERO Deaths 2011--2014

Occupant Protection
Emphasis Areas

Occupant Protection

Emphasis Area Definition:
Occupant Protection is any protective device, including seat belt, airbag, child safety seat, booster seat, which prevents death and/or injury in motor vehicle crashes

Emphasis Area Team Leaders:
Sharon J. Rengers, RN, Office of Child Advocacy, Kosair Children’s Hospital, Co-Leader
Tony Young, Federal Highway Administration—Kentucky Division, Co-Leader

Emphasis Area Goals:
- Reduce motor vehicle fatalities and injuries 25% by December 31, 2014
- Increase Kentucky’s seat belt usage rate to 90% by December 31, 2014
- Decrease the number of unrestrained vehicle occupant fatalities by 15% by December 31, 2014
- Increase the usage rate of unrestrained children age 7 and under to 100% by December 31, 2014

Emphasis Area Objectives:
- Educate the public about the provisions of Kentucky’s primary seat belt law and the consequences of non-compliance

Nationwide vs Kentucky Seat Belt Usage Rates 2005-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>US</th>
<th>KY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>82.0%</td>
<td>66.7%</td>
</tr>
<tr>
<td>2006</td>
<td>81.0%</td>
<td>67.2%</td>
</tr>
<tr>
<td>2007</td>
<td>82.0%</td>
<td>71.9%</td>
</tr>
<tr>
<td>2008</td>
<td>83.0%</td>
<td>73.3%</td>
</tr>
<tr>
<td>2009</td>
<td>84.0%</td>
<td>79.7%</td>
</tr>
<tr>
<td>2010</td>
<td>85.0%</td>
<td>80.3%</td>
</tr>
<tr>
<td>2011</td>
<td>84.0%</td>
<td>82.2%</td>
</tr>
</tbody>
</table>
Emphasis Area Objectives: (cont’d)

- Encourage law enforcement agencies to aggressively enforce the primary seat belt law.
- Encourage law enforcement agencies to aggressively enforce the primary seat belt law during nighttime hours. (8 pm – 6 am)
- Coordinate at least one major statewide law enforcement mobilization focused on occupant protection during the year utilizing “Click It or Ticket” message.
- Continue to increase public awareness about the lifesaving benefits of seat belts, child safety seats and booster seats. Target messages to those segments of the population and to geographic areas with the lowest usage rates.
- Encourage the passage of stronger occupant protection laws for children (specifically, those over 40” tall, who are not adequately protected under the current child restraint law) by providing information and statistics about this topic to lawmakers, safety advocates and grassroots organizations.
- Educate more parents, childcare workers, emergency personnel, and others about how to correctly install child safety seats. Support making more fitting stations and CPS technicians.
Emphasis Areas

**Occupant Protection**

**Emphasis Area Strategies:**

**Engineering**
- Increase use of changeable message boards and signs that encourage restraint use, utilizing the “Click It or Ticket” safety belt campaign message
- Increase permanent road signs in areas of low usage rates
- Increase temporary “enforcement zone” signage in low usage areas

**Enforcement**
- Encourage increased statewide high-visibility enforcement to maximize restraint use.
- Conduct intense, highly publicized periods of increased seat belt enforcement, with traffic safety checkpoints, saturation patrols, and enforcement zones, utilizing the “Click It or Ticket” safety belt campaign message

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![Kentucky Occupant Protection Usage Rates 2006-2012](image)

*Percent Year*
**Occupant Protection**

- Continue to promote nighttime seat belt enforcement program
- Use seat belt survey to target problem areas in rural parts of the state
- Utilize corridor enforcements to sustain occupant protection use
- Encourage prioritization of child passenger safety enforcement statewide
- Compliment annual “Click it or Ticket” campaign with law enforcement awards program

**Education**

- Community outreach – continue and expand public information and education campaigns to educate the general public about the importance of occupant protection
- Initiate local seat belt coalitions
- Educate/train law enforcement personnel and other relevant agencies about occupant protection and to check for proper child restraint use
- Continue to host Lifesavers Traffic Safety Conference with an emphasis on occupant protection and emphasis areas of Strategic Highway Safety Plan
- Increase education on correct seat belt usage with teens and pre-teens
- Increase education on young seat belt usage, with a focus on teens and “Always Buckle Up Children in the Backseat” campaign

**Emphasis Area Performance Measures:**

- Number of injury/fatal/total crashes involving nonuse of safety belts
- Number of injury/fatal/total crashes involving insufficient child restraints
- Safety belt usage rate
- Number of citations issued for non-use of child restraints
- Number of citations/warnings issued
- Number of child seats checked
- Number outreach programs in the communities with needs
- Number of technicians trained
**Occupant Protection**

**Legislative Issues:**

*Accomplished*

- Senate Bill 328, which was passed by the 2012 Legislature, amend KRS 189.125 to apply seat belt requirements to vehicles designed to carry 15 or fewer passengers, rather than 10 or fewer

*Proposed*

- Encourage legislative changes to the occupant protection law to include higher penalties
- Upgrade booster seat law to comply with federal standards
- Support legislation requiring helmets for all motorcycle riders
ROADWAY DEPARTURE
Emphasis Areas

Roadway Departure

Emphasis Area Definition:
The term roadway departure is defined as a non-intersection crash which occurs after a vehicle crosses an edge line, a centerline, or otherwise leaves the traveled way.

Emphasis Area Team Leader:
Jeff Wolfe, Traffic Operations, KYTC

Emphasis Area Goals:
• To reduce the number of annual roadway departure fatalities by 50 by December 31, 2014

Kentucky Roadway Departure Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
</tr>
<tr>
<td>2005</td>
<td>39,799</td>
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<tr>
<td>2006</td>
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<tr>
<td>2007</td>
<td>39,240</td>
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<td>40,854</td>
<td>10,595</td>
</tr>
<tr>
<td>2011</td>
<td>40,313</td>
<td>10,257</td>
</tr>
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</table>

Kentucky Roadway Departure Percentages of Total 2005-2011
Emphasis Areas

Roadway Departure

Emphasis Area Goals: (cont’d)

- To reduce the number of annual roadway departure crashes involving incapacitating injuries by 125 by December 31, 2014
- To have centerline rumble stripes installed on 1,300 miles of roadway by December 31, 2014
- To have edge line rumble stripes installed on 1,000 miles of roadway by December 31, 2014
- To further advance the Safety Edge concept on Kentucky Transportation Cabinet paving operations
- To have 200 miles of cable rail installed by December 31, 2014
- To upgrade horizontal alignment warning signs to new MUTCD and Cabinet standards on at least 850 state-maintained curves identified by the Roadway Departure Implementation Plan by December 31, 2014

Emphasis Area Objectives:

- To implement cost-effective countermeasures at acceptable deployment levels to achieve the planned reduction in roadway departure fatalities and incapacitating injury collisions
- To advance new strategies and concepts that support reductions in roadway departure fatalities and incapacitating injuries

Emphasis Area Strategies:

Engineering

- Develop projects to enhance signs and markings in curves with emphasis on implementation of new MUTCD and Cabinet standards
- Develop projects to install centerline rumble stripes
- Develop projects to install edge line rumble stripes and shoulder rumble strips
- Develop projects to improve roadway delineation
- Develop projects to install high-friction surface treatments
Emphasis Areas

Roadway Departure

Emphasis Area Strategies: (cont’d)

- Develop projects to improve recovery areas
- Upgrade sign sheeting for horizontal alignment warning signs to Type IX, fluorescent yellow material
- Further advance the use of the safety edge concept along our roadways
- Devote approximately 50% of annual HSIP funding to roadway departure initiatives
- Incorporate proven countermeasures into policies and procedures
- Reinstitution of the Safety Circuit Rider Program to address safety issues (including roadway departure) on locally maintained highways

Enforcement

- Support enhanced enforcement on roadways with high frequencies of roadway departure collisions
- Encourage law enforcement participation in road safety audit activities

Education

- Continue support for driver education programs
- Increase communication with media, citizens, partners etc. regarding roadway departure issues and efforts
- Have Safety Circuit Rider program include educational material about roadway departure issues for local officials
Roadway Departure

Engineering, Enforcement, Emergency Response, and Education

- Support 4E efforts along corridors with a high frequency of roadway departure collisions

Emphasis Area Performance Measures:

- Reduction in annual fatalities involving roadway departure collisions (3-year moving average)
- Reduction in annual roadway departure collisions involving incapacitating injuries (3-year moving average)
- Miles of centerline and edge line rumble stripes installed
- Miles of cable rail installed
- Number of state-maintained curves identified in the Roadway Departure Plan where horizontal alignment warning signs are upgraded to comply with MUTCD and Cabinet standards

Legislative Issues:

- Support enhancements to the primary seat-belt and booster seat laws

Before a Road Safety Audit Review

After a Road Safety Audit Review
Emphasis Areas

YOUNG DRIVERS
**Young Drivers**

**Emphasis Area Definition:**
Young drivers are those driver between the ages of 16 and 20.

**Emphasis Area Team Leader:**
Brad Franklin, Young Drivers Program Coordinator, Office of Highway Safety, KYTC

**Emphasis Area Goals:**
To reduce by 10 percent per year (by 2012) the fatalities and hospitalizations over 24 hours involving young drivers on Kentucky roadways through the implementation of strategies which target new drivers, teenage drivers, and parents of teenage drivers

**Kentucky Young Driver Statistics**

<table>
<thead>
<tr>
<th>Year</th>
<th>Collisions</th>
<th></th>
<th>Persons</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Injury</td>
<td>Fatal</td>
<td>Injuries</td>
</tr>
<tr>
<td>2005</td>
<td>30,811</td>
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<td>158</td>
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<td>116</td>
<td>8,987</td>
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<td>2009</td>
<td>27,769</td>
<td>5,737</td>
<td>121</td>
<td>9,127</td>
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<td>2010</td>
<td>26,303</td>
<td>5,231</td>
<td>102</td>
<td>8,551</td>
</tr>
<tr>
<td>2011</td>
<td>25,899</td>
<td>5,137</td>
<td>81</td>
<td>8,199</td>
</tr>
</tbody>
</table>
Young Drivers

Emphasis Area Objective:
To identify safety issues related to young drivers and implement countermeasures to reduce the frequency and severity of these crashes.

Emphasis Area Strategies:
(Check marks illustrate implemented strategies)

- Drivers under 18 years should be subject to a mandatory court appearance for a traffic violation. Parent or guardian should be required to accompany young drivers to court for these violations.
- Amend existing statutes to eliminate the immediate purge, following reinstatement of license, of 0.02 BAC or higher driving under the influence violations from the records of young drivers.
- Include traffic safety education in the Kentucky Core Content/Program Studies and make the teaching of highway safety mandatory in classrooms.
- Revise the requirements of traffic schools to attendance once every two years from once annually, and require parent or guardian of drivers under 18 to attend traffic school with their child as a deterrent to further violations.
- Require parent or guardian of new drivers in the GDL (Graduated Driver Licensing) program to attend the GDL class that these new drivers must have before being allowed to have a full, unrestricted license.
- Include graphic, real-life videos and photos (i.e. Red Asphalt series) in the GDL and Traffic School classes, as this is more of a deterrent to risky driving than materials currently used.
- Increase the fine for not wearing a seatbelt from $25 to $100.

Accomplished Area Strategies:

- Implement a total ban on cell phone usage, to include text messaging, when driving for drivers under 18.
- Continue the partnership with KOHS (Kentucky Office of Highway Safety Educational Programs), which focuses on seatbelt usage in schools. Also include graphic, real-life videos and photos (i.e. Red Asphalt series) to be used in educational programs when targeting teen drivers, as this is one of the most effective methods of reaching this demographic.
Emphasis Areas

Young Drivers

Emphasis Area Performance Measures:

- Number of injury/fatal/total crashes involving young drivers
- Number of traffic-related citations issued to young drivers
- Number of cell phone-related crashes involving young drivers
- Number of young drivers arrested for impaired driving
- Number of young drivers whose licenses are suspended for driving under the influence
- Recidivism rate of young drivers for driving under the influence
- Recidivism rate of young drivers for driving under the influence
- Seatbelt compliance rate among young drivers
- Number of times legislative bills are introduced to deter young drivers from driving under the influence

Legislative Issues:

- Require drivers under 18 years to a mandatory court appearance for a traffic violation. Parent or guardian should be required to accompany young drivers to court for these violations
- Amend existing statutes to eliminate the immediate purge, following reinstatement of license, of 0.02 BAC or higher driving under the influence violations from the records of young drivers
References


Kentucky Transportation Cabinet, Governor’s Executive Committee on Highway Safety (2006). "Kentucky’s Roadmap to Safer Highways." Kentucky Transportation Cabinet, Frankfort, Kentucky.


The Kentucky Strategic Highway Safety Plan for 2011-2014 was developed in cooperation with the partners of the Governor’s Executive Committee on Highway Safety.

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