

Road Services Division 2007 Annual Traffic Safety Report



King County

Department of Transportation

Road Services Division

Prepared by

**Section Manager
Matthew Nolan, P.E.**

Unit Supervising Engineers

**Fatin Kara, P.E.
Norton Posey, P.E.
Mark Mitchell, P.E.
Kevin Chang, P.E.
Bill Blackburn**

Contributions by

**Jamey Barker, P.E.
Jodi Scanlon
Kathy Ooka
Henry Perrin, P.E.
Dan Dovey, P.E.
Mike Crippen
Scott Sawhill
Linda Mott, P.E.
Keith Brown, P.E.
Teresa Lee**

Cover Photo:

S.E. Petrovitsky Road at 140th Avenue S.E. is located in the Fairwood neighborhood and shopping district and at the heart of the North Soos Creek Plateau. S.E. Petrovitsky Road, as a principal arterial and part of the Trans-Valley Corridor, connects the Green Valley industrial area and SR-167 in the west to large residential areas in the east. Also a principal arterial, 140th Ave. S.E. connects SR-169 and the Cedar River Valley in the north through large residential areas in unincorporated King County to Kent in the south. This intersection is on the King County Regional Arterial Network (RAN). This photo was captured from the traffic camera at the intersection. You can access photos of other traffic cameras at: <http://www.metrokc.gov/kcdot/mycommute/default.aspx>



Department of Transportation

**Road Services Division
Traffic Engineering Section
King Street Center, KSC-TR-0222
201 South Jackson Street
Seattle, WA 98104**

TABLE OF CONTENTS

TABLE OF CONTENTS	3
1.0 Executive Summary.....	1
1.1 Trends	2
1.2 2007 Collisions.....	3
1.3 Recommendations.....	4
2.0 Introduction.....	5
2.1 Report Purpose.....	5
2.2 Information Sources.....	5
3.0 External Factors	6
4.0 Collision Trends.....	7
4.1 Overall Trends	7
4.2 Seven Year Collision History	8
4.3 Seven Year Societal Cost.....	9
4.4 Seven Year Calculated Accident Rate	11
4.5 Seven Year Pedestrian and Bicycle Collision History	12
4.6 Seven Year Motorcycle Collision History.....	15
5.0 Collision Types.....	17
5.1 Fixed Object (Run-Off-Road) Collisions	19
5.2 Rear-End Collisions.....	22
5.3 Entering at Angle Collisions.....	24
5.4 Left Turn Collisions.....	25
5.5 Parked Car Collisions	26
5.6 Sideswipes	27
5.7 Head-On Collisions	28
5.8 Pedestrian Collisions	29
5.9 Bicycle Collisions.....	31
5.10 Motorcycle Collisions.....	33
6.0 Other Collision Information	34
6.1 Day of Week and Time of Day.....	34
6.2 Weather and Road Surface Conditions.....	36
6.3 Collision Locations.....	38
6.4 Demographics	43
6.5 Contributing Circumstances	44
6.6 Special Studies.....	45
7.0 Safety related Projects and programs	47
7.1 Roadside Safety	47
7.2 HAL/HARS	48
7.3 Intersection Control	50
7.4 Pedestrian Projects.....	53
7.5 Safety Investigations.....	54
7.6 Special Projects.....	57
8.0 Recommendations.....	58
8.1 Capital Improvement Projects	58
8.2 Collisions in GIS.....	59
8.3 Pavement Marking.....	59
8.4 Traffic Citizen Action Request Tracking (TCARTS)	60
Appendix A.....	61
Appendix B.....	63

1.0 EXECUTIVE SUMMARY

During 2007, a total of 2,714 collision reports were filed within unincorporated King County. The collision reports included 16 fatalities and 938 injury accidents, 1660 no injury collisions and 100 unknown collisions. Using \$1M for fatalities, \$65,000 for injuries, and \$6000 for no injury or unknown “most severe injury type” the estimated societal cost was \$87.5 million..

Executive Summary Table A		
2007		
Most Severe Injury	Number of Collisions	Estimated Cost
Dead at Scene	7	\$7,000,000
Dead on Arrival		
Died in Hospital	9	\$9,000,000
Disabling Injury	85	\$5,525,000
Evident Injury	299	\$19,435,000
Possible Injury	554	\$36,010,000
No Injury	1660	\$9,960,000
Unknown	100	\$600,000
	2714	\$87,530,000

This report reviews collision trends within unincorporated King County and the safety related programs utilized by the King County Department of Transportation (KCDOT) in the ongoing effort to reduce the number and severity of these collisions. It is intended to provide critical information that can be used to better allocate limited safety funds, increase driver awareness of safety concerns, and improve the safety of the traveling public.

This report is prepared by the Road Services Division’s Traffic Engineering Section, and is an integral part of KCDOT’s Safety Management System.

